NOKIA Nseries











Nokia N91 8GB Nokia N91-2

CE 434 **①**

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Your device may cause TV or radio interference (for example, when using a telephone in close proximity to receiving equipment). The FCC or Industry Canada can require you to stop using your telephone if such interference cannot be eliminated. If you require assistance, contact your local service facility. 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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For your safety

Read these simple guidelines. Not following them may be dangerous or illegal. Read the complete user guide for further information.



SWITCH ON SAFELY Do not switch the device on when wireless phone use is prohibited or when it may cause interference or danger.



ROAD SAFETY COMES FIRST Obey all local laws. Always keep your hands free to operate the vehicle while driving. Your first consideration while driving should be road safety.



INTERFERENCE All wireless devices may be susceptible to interference, which could affect performance.



SWITCH OFF IN HOSPITALS Follow any restrictions. Switch the device off near medical equipment.



SWITCH OFF IN AIRCRAFT Follow any restrictions. Wireless devices can cause interference in aircraft.



SWITCH OFF WHEN REFUELING Do not use the device at a refueling point. Do not use near fuel or chemicals.



SWITCH OFF NEAR BLASTING Follow any restrictions. Do not use the device where blasting is in progress.



USE SENSIBLY Use only in the normal position as explained in the product documentation. Do not touch the antenna unnecessarily.



QUALIFIED SERVICE Only qualified personnel may install or repair this product.



ENHANCEMENTS AND BATTERIES Use only approved enhancements and batteries. Do not connect incompatible products.



WATER-RESISTANCE Your device is not water-resistant. Keep it dry.



BACK-UP COPIES Remember to make back-up copies or keep a written record of all important information.



CONNECTING TO OTHER DEVICES When connecting to any other device, read its user guide for detailed safety instructions. Do not connect incompatible products.



EMERGENCY CALLS Ensure the phone function of the device is switched on and in service. Press the **C** as many times as needed to clear the display and return to the standby mode. Enter the emergency number, then press **C** . Give your location. Do not end the call until given permission to do so.

About your device

The wireless device described in this guide is approved for use on the EGSM 900/1800/1900 and UMTS 2100 networks. Contact your service provider for more information about networks.

When using the features in this device, obey all laws and respect privacy and legitimate rights of others.

Copyright protections may prevent some images, music (including ringing tones), and other content from being copied, modified, transferred or forwarded.

When taking and using images or video clips, obey all laws and respect local customs as well as privacy and legitimate rights of others. Warning: To use any features in this device, other than the alarm clock, the device must be switched on. Do not switch the device on when wireless device use may cause interference or danger.

Network Services

To use the phone you must have service from a wireless service provider. Many of the features in this device depend on features in the wireless network to function. These network services may not be available on all networks or you may have to make specific arrangements with your service provider before you can utilize network services. Your service provider may need to give you additional instructions for their use and explain what charges will apply. Some networks may have limitations that affect how you can use network services. For instance, some networks may not support all language-dependent characters and services.

Your service provider may have requested that certain features be disabled or not activated in your device. If so, they will not appear on your device menu. Your device may also have been specially configured. This configuration may include changes in menu names, menu order and icons. Contact your service provider for more information.

This device supports WAP 2.0 protocols (HTTP and SSL) that run on TCP/IP protocols. Some features of this device, such

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as MMS, browsing, e-mail and content downloading via browser or over MMS, require network support for these technologies.

For availability and information on using SIM card services, contact your SIM card vendor. This may be the service provider, network operator, or other vendor.

Enhancements, batteries, and chargers

Always switch the device off and disconnect the charger before removing the battery.

Removing the battery before switching off the device may corrupt the hard drive.

Check the model number of any charger before use with this device. This device is intended for use when supplied with power from a DC-4, AC-3 and AC-4 charger and from an AC-1, ACP-7, ACP-8, ACP-9, ACP-12, LCH-8, LCH-9, or LCH-12 charger when used with the charger adapter CA-44.

The battery intended for use with this device is BL-5C.

Warning: Use only batteries, chargers, and enhancements approved by Nokia for use with this particular model. The use of any other types may invalidate any approval or warranty, and may be dangerous.

For availability of approved enhancements, please check with your dealer. When you disconnect the power cord of any enhancement, grasp and pull the plug, not the cord.

Your Nokia N91 8GB

Model number: Nokia N91-2

Hereinafter referred to as Nokia N91.

Congratulations on your purchase of the Nokia N91. Your device combines stereo sound, storage capacity for up to 6000 songs, over-the-air music downloads, access to your music collection and smartphone functionality with Wi-Fi and 2Mpix camera.

Hard drive

Your device is equipped with a 8 GB hard drive providing high capacity of storage room for different kind of files. Sensors in the device will stop the hard drive if the operating temperature is too low or too high, if the device is dropped, or if the back cover of the device is removed. Hard drives are fragile components that must be handled with care. All impacts caused by shock, vibration, bumping, and dropping or other mishandling of the device, as well as extreme temperatures, humidity and liquids, may cause the hard drive to malfunction and data to be lost or corrupted.

Do not remove the back cover when the device is switched on.

View memory consumption

Leaving applications running in the background increases the demand on battery power and reduces the battery life. To close applications running in the background, press and hold $c_{\mathcal{T}}$ to show open applications, scroll to an application, press \Box , and select Yes to confirm.

To view what types of data you have in the device and how much memory the different data types consume, press for , and select Tools > Hard drive. Select Options > Memory details and scroll down to Free memory to view the amount of free memory in the device.

Memory low-free memory

The device notifies you if the memory is getting low. If the device memory starts to get low when your browser is open, then the browser is closed automatically to free some memory space.

To free device memory, transfer data to the hard drive in File mgr.. Mark files to be moved, select Options > Move to folder > Hard drive, and select a folder.

Tip! To free memory from the device, use Image Store available in Nokia PC Suite to transfer images, and video clips to a compatible PC. See the CD-ROM supplied in the sales package.

To remove data to free memory, use File mgr., or go to the respective application. For example, you can remove the following:

- Messages from Inbox, Drafts, and Sent folders in Messag.
- Retrieved e-mail messages from the phone memory
- Saved Web pages
- Saved images, videos, or sound files
- Contact information
- Calendar notes
- Downloaded applications. See also 'Application manager', p. 114.
- Any other data that you no longer need

Essential indicators

 $\mathbf{\Psi}$ –The phone is being used in a GSM network.

3G (network service)—The phone is being used in a UMTS network. See 'Network', p. 111.

-You have one or more unread messages in the Inbox folder in Messag.

Q You have received new e-mail in the remote mailbox.
 ▲ -There are messages waiting to be sent in the Outbox folder. See 'Outbox-messages waiting to be sent', p. 48.

▲ -You have missed calls. See 'Voice calls', p. 31.

Solution Solution Solution

TO-The phone keypad is locked. See 'Keypad lock (keyguard)', p. 17.

ℜ –You have an active clock alarm. See 'Clock', p. 15.

2 –The second phone line is being used. See 'Call settings', p. 102.

 $_$ All calls to the phone are diverted to another number. If you have two phone lines, the divert indicator for the first line is $_$ and for the second $_$ $_$.

 \mathbf{O} –A headset is connected to the phone.

D–A data call is active.

♣ −A GPRS or EDGE packet data connection is available.

 \mathbf{X} –A GPRS or EDGE packet data connection is active.

 Σ —A GPRS or EDGE packet data connection is on hold. These icons are shown instead of the signal strength indicator (shown in the top left corner in the standby mode). See 'Packet data connections in GSM and UMTS networks', p. 103.

- 35 –A UMTS packet data connection is available.
- $\frac{36}{2}$ –A UMTS packet data connection is active.

 $\frac{3G}{2}$ —A UMTS packet data connection is on hold.

Bluetooth connectivity is On.

(*)-Data is being transmitted using a Bluetooth connection. See 'Bluetooth connectivity', p. 90.

B You have set the device to scan for wireless LANs, and a wireless LAN is available. See 'Wireless LAN', p. 95.

A wireless LAN connection is active in a network that has encryption.

H A wireless LAN connection is active in a network that does not have encryption.

–A USB connection is active.

 $\fbox{\ }$ —You have an e-mail that has been read, waiting for you to retrieve to your phone.

 $^{*}_{\fbox{\mbox{\footnotesize O}}}$ –You have an e-mail that has not been read, waiting for you to retrieve to your phone.

Nokia support on the Web

Check http://www.nokia.com/support or your local Nokia Web site for the latest version of this guide, additional information, downloads, and services related to your Nokia product.



Your device has context-sensitive help. You can access the help from an application or from the main menu.

When an application is open, to access help for the current view, select **Options** > **Help**.

When you are reading the instructions, to switch between help and the application that is open in the background, press and hold \mathbf{s}_{2} .

To open help from the main menu, select Tools > Help. Select the desired application to view the help topics. To search for help topics using keywords, select Options > Search by keyword.

When you are reading a help topic, to view other related topics, scroll left or right with the joystick.



Tutorial

The tutorial gives you information about some of the features of your device. To access the tutorial in the menu, press *(y)*, and select My Own > Tutorial and the section you want to view.



Clock

Press G, and select My Own > Clock.

To set a new alarm, select Options > Set alarm. Enter the alarm time, and select OK. When the alarm is active, the \Im sign is shown.

To turn off the alarm, select **Stop**. When the alarm tone sounds select **Snooze** to stop the alarm for five minutes, after which it resumes. You can do this a maximum of five times.

If the alarm time is reached while the device is switched off, the device switches itself on and starts sounding the alarm tone. If you select **Stop**, the device asks whether you want to activate the device for calls. Select **No** to switch off the device or **Yes** to make and receive calls. Do not select **Yes** when wireless phone use may cause interference or danger.

To cancel an alarm, select Clock > Options > Remove alarm.

Clock settings

To change the clock settings, select Clock > Options > Settings. To change the clock shown in the standby mode, scroll down, and select Clock type > Analogue or Digital.

To allow the mobile phone network to update the time, date, and time zone information to your phone (network service), scroll down, and select Network operator time > Auto-update. For the Network operator time setting to take effect, the phone restarts.

To change the alarm tone, scroll down, and select Clock alarm tone.

World clock

Open Clock, and scroll right to open the world clock view. In the world clock view, you can view the time in different cities.

To add cities to the list, select **Options** > **Add city**. Enter the first letters of the city name. The search field appears automatically, and the matching cities are displayed. Select a city. You can add a maximum of 15 cities to the list.

To set your current city, scroll to a city, and select **Options** > **My current city**. The city is displayed in the clock main view, and the time in your phone is changed according to the city selected. Check that the time is correct and matches your time zone.

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Volume and loudspeaker control

To increase or decrease the volume level, when you have an active call or are listening to a sound, press and hold $[\overline{v}]$ or [] on the left side of the device.

The built-in loudspeaker allows you to speak and listen to the phone from a short distance without having to hold the phone to your ear, for example, having it on a table nearby. Sound applications use the loudspeaker by default.

Warning: Listen to music at a moderate level. Continuous exposure to high volume may damage your hearing. Do not hold the device near your ear when the loudspeaker is in use, because the volume may be extremely loud.

To locate the loudspeaker, see 'Keys and parts' in the Quick start guide.

To use the loudspeaker during a call, start a call, and select **Options > Activate loudsp.**.

To turn off the loudspeaker when you have an active call or are listening to a sound, select **Options** > Activate handset.

Before connecting a device other than original Nokia headphones to the headphone connector of your Nokia N91, adjust the volume level to less than half to prevent sound distortion or damage to the external device. Then you can readjust the volume to the appropriate level.

With some headsets you can only adjust the volume with the volume keys of the headset. If you use the volume keys of the device, the volume changes only after you detach the headset.



File manager

Many features of the phone use memory to store data. These features include contacts, messages, images, ringing tones, calendar and to-do notes, documents, and downloaded applications. The free memory available depends on how much data is already saved in the phone memory.

To browse files and folders in the device memory or hard drive, press ${}^{c}g$, and select Tools > File mgr.. Scroll right to view the hard drive contents.

To move or copy files to a folder, press \Im and press the joystick at the same time to mark a file, and select **Options** > **Move to folder** or **Copy to folder**.

Many different file formats can be opened directly from File manager. However, to get the full functionality you should open the file in the corresponding application, not in File manager.

Icons in File mgr.:

Folder Folder that has a subfolder

To find a file, select **Options** > **Find** , select the search location and enter the text that matches the file name.

Tip! You can use Nokia Phone Browser available in Nokia PC Suite to view the content of the device memory and hard drive of your phone. See the CD-ROM supplied in the sales package.

Keypad lock (keyguard)

To lock: Move the lock switch on top of the device next to the power key, to the left. When you move the switch when the slide cover is closed, all the keys are locked. When you open the slide cover, all the keys are active.

To unlock: Move the switch to the right.

When the keypad lock is on, calls still may be possible to the official emergency number programmed into your device. Enter the emergency number, and press

Music player

Music player supports files with extensions AAC, AAC+, eAAC+, MP3, WMA, MP4, M4A and DCF. **Music player** does not necessarily support all features of a file format or all the variations of file formats.

For more information on player, select **Options** > **Help** for context sensitive help.

Copyright protections may prevent some images, music (including ringing tones), and other content from being copied, modified, transferred or forwarded.

Play a song

- 1 Press 🚱 , and select Music.
- **2** Move the joystick to navigate to a preferred song, artist or other category and press the joystick to open category lists.
- 3 Press ▶ II Play/Pause key to play the selected song or list of songs.

To open the Now playing view of the player from any other view, press the \bigcirc Music access key. To return to previous view, press it again.

To select more music to play in **Now playing** view, select **Options** > **Go to Music menu**.

Controls

 $|\mathbf{b}||$ –Press to go to the next song. To fast forward, press and hold.

Image → Press once to return to the beginning of the song. To skip to the previous song, press within two seconds after a song has started. To rewind through the song, press and hold.

 $\fbox{0}$ –Press to decrease volume. Located on the left side of the device.

 $\fbox{\ }$ \blacksquare -Press to increase volume. Located on the left side of the device.

To lock all the keys of the device, slide the lock switch on top of the device.

☆ Tip! You can also use the keys on the remote to control the device. The lock switch on the side of the remote control only locks the keys of the remote control.

Indicators

Icons in Music player:



🕂 –Repeat all

드-Shuffle on

Loudspeaker muted (displayed in volume popup)

Play modes

Shuffle play

- 1 To switch random play on or off, select Options > Shuffle.
- 2 Select Off or On. The Now playing view is displayed with or without the shuffle icon in top right corner.

Repeat play

- 1 To repeat the current song, all songs, or to switch repeat off, select **Options** > **Repeat**.
- 2 Select Off, All, or Repeat song. The Now playing view is displayed with or without the repeat all
 → or repeat song icon → in the top right corner.

Modify sound

Equalizer

To modify the tone of the music playback, select Options > Equaliser.

To use one of the preset equalizer settings, select it with the joystick, and select Activate. Each preset has different settings on a 8-band graphic equalizer.

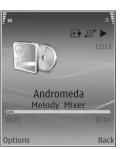
Modify equalizer presets

- 1 To create a new preset, select Options> New preset. To modify an existing preset select Options > Edit.
- **2** To adjust the frequency settings, move the joystick to the left or right to select low, mid, or, high frequency and up or down to increase or decrease the volume of the selected frequency band.
- **3** To reset the settings to their original values, select **Options > Reset to defaults.**

To delete a preset, scroll to it, and press $\hfill\square$. The default presets cannot be deleted.

Audio settings

To modify the balance and stereo image or to enhance bass, select **Options** > **Audio settings**.



Go to music shop

- In Music menu, select Options > Go to Music shop. (This option is not available if music service Web address has not been defined. See 'Music shop settings', p. 20)
- **2** Choose from the options on the screen to search, browse, or select ringing tones.

Music shop settings

The settings may also be predefined and not editable.

You must have valid Internet connections in order to use this service. For more details, see 'Access points', p.104.

The availability and appearance of music shop settings may vary.

You also must have the Web address of the music shop defined in music shop settings.

To change or define the Web address for the music shop, in Music menu, select **Options** > **Go to Music shop**. (Music shop may also be available as a separate shortcut in Operator folder.)

In Music shop, select **Options** > **Settings**. Define the following:

Address:-Enter the Web address of the music shop service.

Default access point:—Select whether to connect automatically or ask before connecting. Only available with WLAN.

User name:-Enter your user name for music shop. If this field is left empty, you may have to enter your user name at login.

Password:—Enter your password for music shop. If this field is left empty, you may have to enter your password at login.

Transfer music

You can transfer music from a compatible PC or other compatible devices using a USB cable or Bluetooth connection. For details about connecting your device, see 'Connectivity', p.90.

The requirements of the PC:

- Windows[®] XP operating system (or later)
- a compatible version of Windows Media[®] player application. You can get more detailed information about Windows Media player compatibility from the N91 section of the Nokia Web site.
- Nokia PC Suite 6.7 or later. The sofware is available for installation on the sales package CD-ROM.

Connection method:

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- USB data cable DKE-2 (miniUSB USB)
- Bluetooth enabled compatible PC

Transfer from PC

You can use three different methods to transfer files:

- To view your device on PC as an external hard drive where you can transfer any data files, make the connection with cable or Bluetooth connectivity. If you are using the DKE-2 USB cable, select Data transfer as the connection method in your device. This method gives you total control of what you move and where, but you cannot see all the file information. You may not be able to transfer material that has been protected against copying. To refresh the Library after you have updated the song selection in your device, go to Music menu, and select Options > Refresh Music library.
- To synchronise music with Windows Media player, attach the USB cable and select Media player as the connection method. This method is good if you want to synchronise all or some of the music files between a compatible PC and your device.
- To use Nokia Music Manager in Nokia PC Suite, attach the DKE-2 USB cable and select PC Suite as the connection method.

USB cable connection

Connect the DKE-2 USB cable to a compatible PC and your device. If you are using Windows XP, your device is automatically recognised as an external hard drive. All the applications in your device are closed, and the phone goes offline.

To synchronise music with Windows Media player, select Media player as the connection method. To select the connection mode, use the joystick.

To change the default USB connection mode, press G, select Connect. > Data cbl. and one of the options in Data cable mode.

Music transfer

Both Windows Media player and Nokia Music Manager in Nokia PC Suite have been optimized for transferring music files. For information about transferring music with Nokia Music Manager, see Nokia PC Suite User Guide provided on the CD-ROM with your Nokia N91.

The following instructions have been written based on information about the latest compatible Windows Media player version available at the time of writing. However, the details of the instructions especially concerning the locations and naming of different options may not be accurate and are subject to change. For more up-to-date information see the corresponding Windows Media player guides and helps.

Manual synchronisation

After connecting your device with a compatible PC, Windows Media player selects manual sync, if there is less than 8 GB of free storage room in your device or if there is not enough storage room to fit your entire library. With manual sync, you select the songs and playlists that you want to move, copy, or remove.

The first time you connect your device you must enter a name that is used as the name of your device in Windows Media player.

To transfer selected manually:

- 1 After your device is connected with Windows Media player, select your device in the Navigation pane, if more than one device is connected.
- 2 Drag the songs or albums to the List pane for synchronisation. To remove songs or albums, select an item in the list and click Remove from list.
- **3** Check that the List pane contains the files you want to synchronise and that there is enough capacity on the device. Click **Start Sync.** to start the synchronisation.

Automatic synchronisation

To change the default file transfer option in Windows Media player, click the arrow under Sync , select your

device, and click Set up Sync. Clear or select the Sync this device automatically check box.

If the Sync this device automatically check box is selected and you connect your device, your N91 music library is automatically updated based on playlists you have selected in Windows Media player.

If no playlists have been selected, the whole PC music library is selected for syncronisation. Note that your PC library may contain more files that can fit to the hard drive of your Nokia N91. See Windows Media player help for more information.

The playlists on your device are not synchronised with the Windows Media player playlists.

Playlists

Create a playlist

To create a playlist of songs:

- 1 Select Options > Create playlist in Playlists view.
- 2 Enter a name for the playlist, and select OK or press the joystick.
- **3** Expand and collapse an artist title to find the songs you want to include in the playlist. Press the joystick to add items. To show the song list under an artist title, move

the joystick to the right. To hide the song list, move the joystick to the left.

4 When you have made your selections, select **Done**.

Add songs to a playlist

You can add songs to an existing playlist or first create a new playlist.

- 1 In a song list, select Options > Add songs.
- 2 Expand and collapse an artist title to find the songs you want to include in the playlist. Press the joystick to add items. To show the song list under an artist title, move the joystick to the right. To hide the song list, move the joystick to the left.
- **3** When you have made your selections, select **Done**.
- Tip! You can even add songs to a playlist that is currently playing.

To search for a song start entering letters with the keypad.

Reorder songs

- 1 Select Options > Reorder list in a playlist view.
- **2** The selected song is ready to be moved. Scroll up or down to move it or leave it there.
- 3 Select Drop.
- 4 Scroll to the song you want to move.
- 5 Select Grab.

- 6 Scroll to a new position.
- 7 Select Drop.
- 8 When you have reordered the list, select **Done**.

Tip! To grab and drop, you can also press the joystick.

Remove songs from a playlist

You can remove songs from a playlist.

- 1 Scroll to a song in a playlist.
- 2 Select Options > Remove from playlist.
- **3** Select Yes to confirm. This deletion does not delete the song from the device; it only removes it from the playlist.

Add items from views to a playlist

You can add songs, albums, artists, genres, and composers from different views of the Music menu to existing or new playlists.

- 1 In a view opened from the Music menu, select an item.
- 2 Select Options > Add to a playlist > Saved playlist or New playlist.
- **3** If you selected New playlist, enter a name for the playlist, and select OK. If you selected Saved playlist, select the playlist and OK.
- Tip! In some of the views you can select multiple songs to be added by selecting Options > Mark/ Unmark > Mark.

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Tip! You can add a song that you are currently listening to to a playlist.

Playlist details

In **Playlists** view, Select **Options** > **Playlist details**. The following information is displayed:

Name-The name of the playlist

Songs—The current number of songs in the playlist Location—The location of the playlist on the hard drive Date—The date the playlist was last modified Time—The time the playlist was last modified

Automatic playlists

The following playlists appear in the playlist view automatically:

Most played tracks—Includes the 40 most-played songs listed from the most recently played songs

Recent tracks-Includes 40 most recently played songs in reverse order, ending with the most recently played song.

Recent additions—Includes songs that you have added to the library within the past week.

Available options

The following items are available as options in different views of Music player.

Go to Now playing—Opens a view that displays information about the song that is currently being played

Go to Music shop—Opens wireless connection to a Web shop, where you can search for, browse, and purchase music

Refresh Music library–Updates the library list by scanning the hard drive for new songs and removing broken links

Song details/Playlist details/Music library details-Displays information about the selected item

Help-Opens the help application

Create playlist—Opens a view where you can create a new playlist

Send-Allows you to send the selected item to another compatible device

Delete—Removes the selected item after confirmation. The song is permanently deleted from the hard drive.

Rename-Renames the selected item

Add to a playlist—Add the selected item to an existing playlist or new playlist

Album art—Opens a view which will show you album art currently attached to the selected album or song You can change or add album art using images on your phone.

Mark/Unmark-Allows you to select several items for action

Set as ringing tone—Selects the selected song as the ringing tone of the active profile. If you select songs from the hard drive to be used as ringing tones, they may not work with vibra. For optimal performance, store the ringing tones in the device memory.

Reorder list-Rearrange the songs of a playlist

Options only in Now Playing view

Go to Music menu-Opens the Music menu view

Shuffle—Switches the shuffle mode on or off. In shuffle mode the songs are played in random order.

Repeat—Repeats the song or all songs in the list that is currently being played.

Equaliser—Opens a view where you can adjust the sound frequency balance.

Audio settings—Opens a view where you can change the sound balance, stereo image and bass response.

Start visualisation—Opens a list of available visualizations.

Rename items

- 1 Select an Artist, Album, Genre, or Composer from the list.
- 2 Select Options > Rename.
- **3** Enter the new name, and select **OK**. All songs belonging to the selected artist, album, genre, or composer are updated.

View and edit song details

In a song view, Select **Options** > **Song details**. The following information is displayed and editable.

Song name—The name of the song

Artist-The name of the artist

Album-The name of the album to which this song belongs

Track number—The song position in the album to which this song belongs

Year-The year in which the album was released

Genre-The style category to which this song belongs

Composer-The name of the composer of this song

Comment-Any other information about this song

To view details like Format, Duration, and Copyright, select Options > View file details in Song details view.

Library details

In Music menu select Options > Music library details. The following information is displayed:

Songs-The current number of songs in the library

Duration-The length of current songs together

Used-The total size of the files in the music libray

Available–Available hard disk space in gigabytes

Refreshed-The date when the libraray was last modified

Set a song as a ringing tone

- 1 Select a song.
- 2 Select Options > Set as ringing tone. The selected song has been set as the ringing tone for the active profile.

Visualization

- 1 In Now playing view, select Options > Start visualisation.
- **2** Select one of the available visulizations.

3 Press Close to return to Now playing view.

Change album art

- 1 Select a song.
- 2 Select Options > Album art.
- **3** Select **Options** > **Change**.
- 4 Scroll throough images from your Gallery, and select Select:.
- **5** To restore the original album art, select **Restore** original.

About encoded audio

Applications like Windows Media player and Nokia Audio Manager encode audio files with codecs like WMA or MP3 to save storage space. The encoding is done by removing those parts of the audio signal that are not audible or only barely audible by human ear.

Regardless of the encoder and codec quality, the sound quality of the resulting file is not as good as the original.

The basic codecs supported by this device are AAC, WMA, and MP3. All of these have different variations.

Bitrates

When encoding audio, the quality of the resulting sound depends on the sample rate and bit rate used for the encoding. Sample rate is expressed as thousands of samples per second (kHz), and for CD music the sample rate is fixed at 44.1 kHz. Bit rate is expressed as kilobits per second (Kbps). The higher the bitrate, the better the sound quality.

The required quality level may depend on your demands, the headphones used, and the surrounding noise. For MP3s a bitrate between 128 and 192 Kbps usually gives results good enough for listening to pop music with your device. WMA or AAC generally gives a similar result as MP3 with one step lower bitrate (96-160 Kbps). Variations of AAC, such as AAC+ and enhanced AAC+ (eAAC+) provide CD quality audio at bitrates as low as 48 Kbps. Classical music and music with nuances usually require a higher bitrate than basic pop music.

For speech or other sources where the quality of the sound is less important than saving storage space, you can use bitrates between 8 and 64 Kbps. At low bitrates WMA or AAC generally gives better results than MP3.

Variable bitrate

Your device also supports variable bitrate (VBR). Variable bitrate means that the bit rate of the encoding varies with

the complexity of the encoded material. When using VBR, the encoding is optimized to preserve a constant audio quality throughout the track, rather than losing quality for complex music sections as with constant bitrate (CBR) encoding.

Personalize your device

Your service provider may have requested that certain features be disabled or not activated in your device. If so, they will not appear on your device menu. Your device may also have been specially configured for your network provider. This configuration may include changes in menu names, menu order, and icons. Contact your service provider for more information.



Profiles-Set tones

To set and customize the ringing tones, message alert tones, and other tones for different events, environments, or caller groups, press $\{ g \}$, and select Tools > Profiles. If the currently selected profile is other than General, the profile name is shown at the top of the display in the standby mode.

To change the profile, press \bigodot in the standby mode. Scroll to the profile you want to activate, and select OK.

To modify a profile, press $\{ c \}$, and select Tools > Profiles. Scroll to the profile, and select Options > Personalise. Scroll to the setting you want to change, and press the joystick to open the choices. Tones stored on the hard drive are indicated with **Constant**. You can scroll through the tone list and listen to each one before you make your selection. To stop the sound, press any key.

When you choose a tone, **Tone downloads** opens a list of bookmarks. You can select a bookmark and connect to a Web page to download tones.

If you want the caller's name to be said when your device rings, select **Options** > **Personalise**, and set **Say caller's name** to **On**. The caller's name must be saved in **Contacts**.

To create a new profile, select **Options** > **Create new**.

If listen to music and Music profile is selected, you only hear a beep for incoming calls and all the other alert tones are switched off.

Offline profile

The Offline profile lets you use the device without connecting to the wireless network. When you activate the Offline profile, the connection to the wireless network is turned off, as indicated by \mathbf{X} in the signal strength indicator area. All wireless phone signals to and from the device are prevented. If you try to send messages, they are placed in the outbox to be sent later.

When you have activated the Offline profile, you can still use the wireless LAN (if available) to read your e-mail or browse on the Internet, for example. Remember to comply with any applicable safety requirements when establishing and using a wireless LAN connection. See 'Wireless LAN', p. 95.

Warning: In the offline profile you cannot make (or receive) any calls, except make calls to certain emergency numbers, or use other features that require network coverage. To make calls, you must first activate the phone function by changing profiles. If the device has been locked, enter the lock code.

Warning: Your device must be switched on to use Offline profile. Do not switch the device on when wireless device use is prohibited or when it may cause interference or danger.

To leave the Offline profile, press f_{2}^{o} , and select Tools > Profiles, scroll to another profile, and select Options > Activate > Yes. The device re-enables wireless transmissions (providing there is sufficient signal strength). If Bluetooth connectivity is activated before entering the Offline profile, it will be deactivated. Bluetooth connectivity is automatically reactivated after leaving the Offline profile. See 'Settings', p. 91.



Change the look of your device

To change the look of the display, such as the wallpaper and icons, press G, and select Tools > Themes. The active theme is indicated by \checkmark . In Themes you can group together elements from other themes or select images from the Gallery to personalize themes further. The themes on the hard drive are indicated by \bigcirc .

To open a browser connection and download more themes, select Theme downloads.

To activate a theme, scroll to it, and select **Options** > **Apply**. To preview a theme before activating it, select **Options** > **Preview**.

To edit themes, scroll to a theme, and select **Options** > **Edit** to change the **Wallpaper** and **Power saver** settings.

To restore the selected theme to its original settings, select **Options** > **Restore orig. theme** when you edit a theme.

Active standby mode

Use your standby display for fast access to your most frequently used applications. By default, the active standby mode is on.

Press *G* , select Tools > Settings > Phone > Standby mode > Active standby, and press the joystick to switch the active standby on or off.

The active standby display is shown with default applications across the top of the screen, and calendar, to-do, and player events are listed below.

Scroll to an application or event, and press the joystick.

The standard joystick shortcuts available in the standby mode cannot be used when the active standby



used when the active standby mode is on.

To change the default application shortcuts, press f_{g} , select Tools > Settings > Phone > Standby mode > Active standby apps., and press the joystick.

Some shortcuts may be fixed, and you cannot change them.

Make calls

Voice calls

- Tip! To increase or decrease the volume during a call, press the keys on the left side of the device.
- 2 Press
 to call the number.
- 3 Press to end the call (or to cancel the call attempt).

Pressing always ends a call, even if another application is active.

Tip! To end a call when you are not using the headset, press — during the call, and close the slide within 15 seconds. Closing the slide when you are using the headset does not end the call.

To make a call from Contacts, press c , and select Contacts. Scroll to the desired name, or enter the first

letters of the name to the search field. Matching contacts are listed. Press
to call.

You must copy the contacts from your SIM to Contacts before you can make a call this way. See 'Copy contacts', p. 36.

To call your voice mailbox (network service), press and hold **1** in the standby mode. See also 'Call diverting', p. 110.

Sight Tip! To change the phone number of your voice mailbox, press ¹/₉, and select Tools > Voice mail > Options > Change number. Enter the number (obtained from your service provider), and select OK.

To call a recently dialled number in the standby mode, press n to access a list of the 20 last numbers you called or attempted to call. Scroll to the number you want, and press n to call the number.

Make a conference call

- 1 Make a call to the first participant.
- 2 To make a call to another participant, select Options > New call. The first call is automatically put on hold.

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3 When the new call is answered, to join the first participant in the conference call, select **Options** > **Conference**.

To add a new person to the call, repeat step 2, and select **Options** > **Conference** > **Add to conference**. Your device supports conference calls between a maximum of six participants, including yourself. To have a private conversation with one of the participants, select **Options** > **Conference** > **Private**. Scroll to a participant, and select **Private**. The conference call is put on hold on your device. The other participants can still continue the conference call. Once you have finished the private conversation, select **Options** > **Conference** > **Add to conference** to return to the conference call.

To drop a participant, select **Options > Conference> Drop participant**, scroll to the participant, and select **Drop.**

4 To end the active conference call, press $\begin{array}{c} \begin{array}{c} \end{array}$.

Speed dial a phone number

To activate speed dialling, press ${\bf s}^o$, and select Tools> Settings > Call > Speed dialling > On.

To assign a phone number to one of the speed dialling keys (2 - 9), press f_{3} , and select Tools > Spd. dial. Scroll to the key to which you want to assign the phone

number, and select Options > Assign. 1 is reserved for the voice mailbox.

To call in the standby mode, press the speed dial key and $\hfill \hfill \hfil$

Voice dialling

Your device supports enhanced voice commands. Enhanced voice commands are not dependent on the speaker's voice, so the user does not record voice tags in advance. Instead, the device creates a voice tag for the entries in contacts, and compares the spoken voice tag to it. The voice recognition in the device adapts to the main user's voice to recognise the voice commands better.

The voice tag for a contact is the name or nickname that is saved on the contact card. To listen to the synthesised voice tag, open a contact card, and select Options > Play voice tag.

Make a call with a voice tag

Note: Using voice tags may be difficult in a noisy environment or during an emergency, so you should not rely solely upon voice dialling in all circumstances.

When you use voice dialling, the loudspeaker is in use. Hold the device at a short distance away when you say the voice tag.

- 1 To start voice dialling, press and hold the right selection key. If you are using a compatible headset with the headset key, press and hold the headset key to start voice dialling.
- 2 A short tone is played, and Speak now is displayed. Say clearly the name or nickname that is saved on the contact card.
- **3** The device plays a synthesised voice tag for the recognised contact in the selected device language, and displays the name and number. After a timeout of 1.5 seconds, the device dials the number.

If the recognised contact was not correct, select Next to view a list of other matches, or Quit to cancel voice dialling.

If several numbers are saved under the name, the device selects the default number, if it has been set. Otherwise the device selects the first available number of the following: Mobile, Mobile (home), Mobile (business), Telephone, Tel. (home), and Tel. (business).

Answer or reject a call

To answer the call, press \frown or open the slide cover.

To mute the ringing tone when a call comes in, select Silence.

☆ Tip! You can also use the m key on the remote control to answer and end a call.

If you do not want to answer a call, press to reject it. If you have activated the Call divert > If busy function to divert calls, rejecting an incoming call also diverts the call. See 'Call diverting', p. 110.

When you reject an incoming call, you can also select Send text message to send a message to the caller informing why you cannot answer the call. You can edit the text before sending it. To set up this option and write a standard text message, see 'Call settings', p. 102.

Call waiting (network service)

You can answer a call while you have another call in progress if you have activated Call waiting in Settings > Call > Call waiting.

☆ Tip! To change the device tones for different environments and events, for example, when you want your device to be silent, see 'Profiles–Set tones', p. 28.

To answer the waiting call, press \frown . The first call is put on hold.

To switch between the two calls, select Swap. Select Options > Transfer to connect an incoming call or a call on hold with an active call and to disconnect yourself from the calls. To end the active call, press — . To end both calls, select Options > End all calls.

Options during a voice call

Many of the options that you can use during a voice call are network services. Select Options during a call for some of the following options: Mute or Unmute, Answer, Reject, Swap, Hold or Unhold, Activate handset, Activate loudsp., or Activate handsfree (if a compatible headset with Bluetooth connectivity is attached), End active call or End all calls, New call, Conference, and Transfer. Select from the following:

Replace—To end an active call and replace it by answering the waiting call.

Send DTMF—To send DTMF tone strings, for example, a password. Enter the DTMF string or search for it in Contacts. To enter a wait character (w) or a pause character (p), press * repeatedly. Select OK to send the tone.

Tip! You can add DTMF tones to the Phone number or DTMF fields in a contact card.



Press $\{ g \}$, and select **Contacts**. In **Contacts** you can add a personal ringing tone or a thumbnail image to a contact card. You can also create contact groups, which allow you to send text messages or e-mail to many recipients at the same time. You can add received contact information (business cards) to contacts. See 'Data and settings', p. 44. Contact information can only be sent to or received from compatible devices.

☆ Tip! Regularly back up the device information. You can restore the information, such as contacts, to the device later. You can use Nokia PC Suite to back up your contacts to a compatible PC. See the CD-ROM supplied with your device.

Save names and numbers

- 1 Select Options > New contact.
- 2 Fill in the fields that you want, and select **Done**.

To edit contact cards in **Contacts**, scroll to the contact card you want to edit, and select **Options** > **Edit**.

To delete a contact card in **Contacts**, select a card, and press \Box . To delete several contact cards at the same time, press and hold \Im and press the joystick to mark

each contact you want to delete. Press $\hfill\square$ to delete the marked contacts. $\hfill\square$

⇒b Tip! To add and edit contact cards, use Nokia Contacts Editor available in Nokia PC Suite. See the CD-ROM supplied with your device.

To attach a small thumbnail image to a contact card, open the contact card, and select **Options** > **Edit** > **Options** > **Add thumbnail.** The thumbnail image is shown when the contact calls.

- Tip! Speed dialling is a quick way to call frequently used numbers. You can assign speed dialling keys to eight phone numbers. See 'Speed dial a phone number', p. 32.
- Tip! To send contact information, select the card you want to send. Select Options > Send > Via text message, Via multimedia, Via e-mail, or Via Bluetooth. See 'Messaging', p. 38 and 'Send data using Bluetooth connectivity', p. 92.

To add a contact to a group, select **Options > Add to** group: (shown only if you have created a group). See 'Create contact groups', p. 37. To view the amount of contacts, groups, and the available memory, select Contacts > Options > Contacts info.

Default numbers and addresses

You can assign default numbers or addresses to a contact card. In this way if a contact has several numbers or addresses, you can easily call or send a message to the contact at a certain number or address. The default number is also used in voice dialing.

- 1 In contacts, scroll to a contact, and press the joystick.
- 2 Select Options > Defaults.
- 3 Select a default to which you want to add a number or an address, and select Assign.
- 4 Select a number or an address you want to set as a default.

The default number or address is underlined in the contact card.

SIM directory and SIM services

For availability and information on using SIM card services, contact your SIM card vendor. This may be the service provider, network operator, or other vendor.

Press Sy and select Contacts > Options > SIM contacts > SIM directory to see the names and numbers

stored on the SIM card. In the SIM directory you can add, edit, or copy numbers to contacts, and you can make calls.

To view the list of fixed dialing numbers, select **Options** > **SIM contacts** > **Fixed dialling contacts**. This setting is only shown if supported by your SIM card.

To restrict calls from your device to selected phone numbers, select **Options** > **Activ. fixed dialling**. To add new numbers to the fixed dialing list, select **Options** > **New SIM contact**. You need the PIN2 code for these functions.

When you use Fixed dialling, packet data connections are not possible, except when sending text messages over a packet data connection. In this case, the message center number and the recipient's phone number must be included on the fixed dialing list.

When fixed dialing is activated, calls may be possible to the official emergency number programmed into your device.

Copy contacts

To copy names and numbers from a SIM card to your device, press ${}^{G}_{\mathcal{G}}$, and select Contacts > Options > SIM contacts > SIM directory. Select the names you want to copy and Options > Copy to Contacts.

To copy contacts to your SIM card, press $\{g\}$, and select Contacts. Select the names you want to copy and Options > Copy > To SIM directory. Only the contact card fields supported by your SIM card are copied.

To edit phone number to which calls from your device are allowed, press *f*^o, and select Contacts > Options > SIM contacts > Fixed dialling contacts. Scroll to the contact and select Options > Edit. You may need your PIN2 code to edit your fixed dialling numbers.

☆ Tip! You can synchronise your contacts to a compatible PC with Nokia PC Suite. See the CD-ROM supplied with your device.

Add ringing tones for contacts

When a contact or group member calls you, the device plays the chosen ringing tone (if the caller's telephone number is sent with the call and your device recognises it).

- Press the joystick to open a contact card, or go to the groups list, and select a contact group.
- 2 Select Options > Ringing tone. A list of ringing tones opens.
- **3** Select the ringing tone you want to use for the individual contact or the selected group.

To remove the ringing tone, select **Default tone** from the list of ringing tones.

Create contact groups

- 1 In Contacts, move the joystick right to open the groups list.
- 2 Select Options > New group.
- **3** Write a name for the group or use the default name Group (number), and select OK.
- 4 Open the group, and select **Options** > **Add members**.
- **5** Scroll to a contact, and press the joystick to mark it. To add multiple members at a time, repeat this action on all the contacts you want to add.
- 6 Select OK to add the contacts to the group.

To rename a group, select **Options** > **Rename**, enter the new name, and select **OK**.

Remove members from a group

- 1 In the groups list, open the group you want to modify.
- 2 Scroll to the contact, and select Options > Remove from group.
- **3** Select **Yes** to remove the contact from the group.
- Tip! To check to which groups a contact belongs, scroll to the contact, and select Options > Belongs to groups.

Messaging

Press **(***y*[°]), and select **Messag.**. In **Messag.**, you can create, send, receive, view, edit, and organise text messages, multimedia messages, e-mail messages, and special text messages containing data. You can also receive messages and data using Bluetooth connectivity, receive Web service messages, cell broadcast messages, and send service commands.

Note: Only devices that have compatible features can receive and display multimedia messages. The appearance of a message may vary depending on the receiving device.

When you open Messag., you can see the New message function and the following folders:

Inbox—Received messages, except e-mail and cell broadcast messages, are stored here. E-mail messages are stored in the Mailbox.

My folders—For organizing your messages into folders.

Mailbox—Connect to your remote mailbox to retrieve your new e-mail messages or view your previously retrieved e-mail messages offline. See 'E-mail', p. 51. Stored here.

Sent—The last 20 messages that were sent, excluding messages sent using Bluetooth connectivity, are stored here. To change the number of messages to be saved, see 'Other settings', p. 53.

Outbox-Messages waiting to be sent are temporarily stored here.

☆ Example: Messages are placed in the outbox when your device is outside network coverage. You can also schedule e-mail messages to be sent the next time you connect to your remote mailbox.

Reports—You can request the network to send you a delivery report of the text messages and multimedia messages you have sent (network service). Receiving a delivery report of a multimedia message that has been sent to an e-mail address may not be possible.

Tip! When you have opened any of the default folders, to switch between the folders, move the joystick to the right or left.

To enter and send service requests (also known as USSD commands), such as activation commands for network

services, to your service provider, select **Options** > **Service command** in the main view of **Messag**.

Cell broadcast (network service) allows you to receive messages on various topics, such as weather or traffic conditions from your service provider. For available topics and relevant topic numbers, contact your service provider. In the main view of Messaging, select Options > Cell broadcast. In the main view you can see the status of a topic, a topic number, name, and whether it has been flagged () for follow-up.

Cell broadcast messages cannot be received in UMTS networks. A packet data connection may prevent cell broadcast reception.

Write text

ABC, abc, and Abc indicate the selected character mode. 123 indicates the number mode.

Traditional text input

The indicator V is shown on the top right of the display when you are writing text using traditional text input.

- Press a number key (1 9) repeatedly until the desired character appears. There are more characters available for a number key than are printed on the key.
- To insert a number, press and hold the number key.

- To switch between letter and number mode, press and hold # .
- If the next letter is located on the same key as the present one, wait until the cursor appears (or quickly move the joystick to the right to end the time-out period), and enter the letter.
- To erase a character, press
 . Press and hold
 to clear more than one character.
- The most common punctuation marks are available under 1. Press 1 repeatedly to reach the desired punctuation mark.

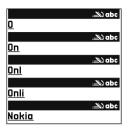
Press ***** to open a list of special characters. Use the joystick to move through the list, and press **Select** to select a character.

- To insert a space, press **()** . To move the cursor to the next line, press **()** three times.
- To switch between the different character modes, press **#**.

Predictive text input-Predictive text

You can enter any letter with a single key press. Predictive text input is based on a built-in dictionary to which you can also add new words. _____ is shown on the top right of the display when you write text using predictive text input.

- 1 To activate predictive text input, press , and select Predictive text on. This activates predictive text input for all editors in the device.



example, to write 'Nokia' when the English dictionary is selected, press 6 for N, 6 for o, 5 for k, 4 for i, and 2 for a.

The word suggestion changes after each press.

3 When you finish writing the word correctly, scroll right to confirm it, or press **0** to add a space. If the word is not correct, press ***** repeatedly to view each matching word, or press **③**, and select Predictive text > Matches.

If the ? character is shown after the word, the word is not in the dictionary. To add a word to the dictionary, select **Spell**, enter the word using traditional text input, and select **OK**. The word is added to the dictionary. When the dictionary is full, a new word replaces the oldest added word.

4 Start writing the next word.

☆ Tip! To set predictive text input on or off, quickly press # twice.

Tips on text input

To insert a number in letter mode, press and hold the desired number key.

To switch between the different character modes, press # .

To erase a character, press $\hfill\square$. Press and hold $\hfill\square$ to clear more than one character.

Press * to open a list of special characters.

Tip! To insert several special characters at the same time, press 5 when you select each character.

The most common punctuation marks are available under 1 . Press 1 , then $\mbox{ * repeatedly to search for the desired punctuation mark.}$

☆ Tip! Predictive text input tries to guess which commonly used punctuation mark (.,?!') is needed. The order and availability of the punctuation marks depend on the language of the dictionary.

Press $\ \ast \$ repeatedly to view the matching words the dictionary has found one by one.

Press \bigotimes , select Predictive text, and scroll right to select one of the following options:

Matches—To view a list of words that correspond to your key presses.

Insert word—To add a word to the dictionary by using traditional text input. When the dictionary becomes full, a new word replaces the oldest added word.

Edit word—To edit the word using traditional text input. This is available if the word is active (underlined).

Tip! When you press , the following options appear (depending on the editing mode): Predictive text (predictive text input), Alpha mode (traditional text input), Number mode, Cut (if text has been selected), Copy (if text has been selected), Paste (when text has been cut or copied first), Insert number, Insert symbol, and Writing language: (changes the input language for all editors in the phone).

Write compound words

Write the first half of a compound word; to confirm it, move the joystick right. Write the last part of the compound word. To complete the compound word, press **0** to add a space.

Turn predictive text input off

Press \bigotimes_{i} , and select Predictive text > Off to turn predictive text input off for all editors in the phone.

Copy text to clipboard

- To select letters and words, press and hold Song . At the same time, move the joystick left or right. As the selection moves, text is highlighted.
- 2 To copy the text to the clipboard, while still holding S , select Copy.
- 3 To insert the text into a document, press and hold ⊗, , and select Paste, or press ⊗ once, and select Paste. To select lines of text, press and hold ⊗. At the same time move the joystick up or down.

To remove the selected text from the document, press $\hfill\square$.

Write and send messages

The appearance of a multimedia message may vary, depending on the receiving device.

Copyright protections may prevent some images, music (including ringing tones), and other content from being copied, modified, transferred or forwarded.

Tip! You can start to create a message from any application that has the option Send. Select a file (image or text) to be added to the message, and select Options > Send.

Before you can create a multimedia message or write an e-mail, you must have the correct connection settings in

place. See 'Receive MMS and e-mail settings', p. 43 and 'E-mail', p. 51.

The wireless network may limit the size of MMS messages. If the inserted picture exceeds this limit, the device may make it smaller so that it can be sent by MMS.

1 Select New message and one of the following: Text msg.—to send a text message Multimedia message—to send a multimedia message (MMS)

E-mail-to send an e-mail. If you have not set up your e-mail account, you are prompted to do so. To start creating the e-mail settings with the mailbox guide, select Start.

- 2 In the To field, press the joystick to select recipients or groups from contacts, or enter the recipient's phone number or e-mail address. Press * to add a semicolon (;) that separates the recipients. You can also copy and paste the number or address from the clipboard.
 - Tip! Scroll to a contact, and press the joystick to mark it. You can mark several recipients at a time.
- 3 In the Subject field, enter the subject of a multimedia message or e-mail. To change the fields that are visible, select Options > Address fields.
- 4 Move the joystick down to move to the message field and write the message. To use a template, select Options > Insert or Insert object > Template.

- 5 To add a media object to a multimedia message, select Options > Insert object > Image, Sound clip, or Video clip. When sound is added, the Source and the source added is shown. You may not be able to send video clips that are saved in the .mp4 format in a multimedia message. To change the format in which recorded videos are saved, see 'Video settings', p. 58.
 - To take a new picture or record sound or video for a multimedia message, select Insert new > Image, Sound clip, or Video clip. To insert a new slide to the message, select Slide. To see what the multimedia message looks like, select Options > Preview.



- 7 To add an attachment to an e-mail, select Options > Insert > Image, Sound clip, Video clip or Note. E-mail attachments are indicated by [].
 - Tip! To send files other than sounds and notes as attachments, open the appropriate application, and select Send > Via e-mail, if available.
- 8 To send the message, select **Options** > **Send**, or press
 - **C**

Your device supports the sending of text messages beyond the character limit for a single message. Longer messages will be sent as a series of two or more messages. Your service provider may charge accordingly. Characters that use accents or other marks, and characters from some language options like Chinese, take up more space limiting the number of characters that can be sent in a single message. In the navigation bar, you can see the message length indicator counting backwards. For example, 10 (2) means that you can still add 10 characters for the text to be sent as two messages.

E-mail messages are automatically placed in Outbox before sending. If sending does not succeed, the e-mail is left in the Outbox.

- Tip! In Messaging you can also create presentations and send them in a multimedia message. In the multimedia message editor view, select Options > Create presentation (shown only if MMS creation mode is set to Guided or Free). See 'Multimedia messages', p. 50.
- Tip! When you send a multimedia message to an e-mail address or a device that supports the receiving of large images, use the larger image size. If you are not sure of the receiving device, or the network does not support sending large files, it is recommended that you use a smaller image size or a sound clip that is no longer than 15 seconds. To change the setting, select

Options > Settings > Multimedia message > Image size in the **Messaging** main view.

Note: The indicators showing that the message has been sent indicate that the message has been sent by your device to the message center number programmed into your device. This is not an indication that the message has been received at the intended destination. For more details about messaging services, check with your service provider.

Receive MMS and e-mail settings

You may receive the settings in a text message from your network operator or service provider. See 'Data and settings', p. 44.

For availability of and subscription to data services, contact your network operator or service provider. Follow the instructions given by your service provider.

Enter the MMS settings manually:

- Press (p) and select Tools > Settings > Connection > Access points, and define the settings for a multimedia messaging access point. See 'Connection', p. 103.
- 2 Press ${\mathcal{G}}$, and select Messaging > Options > Settings > Multim. msg. > Access point in use and

the access point you created as the preferred connection. See also 'Multimedia messages', p. 50.

Before you can send, receive, retrieve, reply to, and forward e-mail, you must do the following:

- Configure an Internet access point (IAP) correctly. See 'Connection', p. 103.
- Define your e-mail settings correctly. If you select Mailbox in the Messag. main view and have not set up your e-mail account, you are prompted to do so. To start creating the e-mail settings with the mailbox guide, select Start. See 'E-mail', p. 51.
 You must have a separate e-mail account. Follow the instructions given by your remote mailbox and Internet service provider (ISP).

Inbox-receive messages

Inbox folder has the following indicators:

^{*} → Unread text message.

📩 —Unread multimedia message.

B-Data received through Bluetooth connectivity.

When you receive a message, and the text 1 new message are shown in the standby mode. To open the message, select Show. To open a message in Inbox, scroll to it, and press the joystick.

To reply to a received message, select **Options** > **Reply**.

Multimedia messages

Important: Excercise caution when opening messages. Multimedia message objects may contain malicious software or otherwise be harmful to your device or PC.

You may receive a notification that a multimedia message is waiting in the multimedia message center. To start a packet data connection to retrieve the message to your device, select **Options** > **Retrieve**.

When you open a multimedia message ($\stackrel{*}{}_{a}$), you may see an image and a message. $\stackrel{*}{\Longrightarrow}$ is shown if sound is included, or $\stackrel{*}{\Longrightarrow}$ if video is included. To play the sound or the video, select the indicator.

To see what kinds of media objects have been included in the multimedia message, open the message, and select **Options > Objects.**

If the message includes a multimedia presentation, 🗾 is displayed. To play the presentation, select the indicator.

Data and settings

Your device can receive many kinds of messages that contain data:

Configuration message—You may receive settings from your network operator, service provider, or company information management department in a configuration message. To save the settings, select **Options** > **Save all**.

Business card—To save the information to Contacts, select Options > Save business card. Certificates or sound files attached to the business card are not saved.

Ringing tone—To save the ringing tone, select Options > Save.

Operat. logo—To have the logo shown in the standby mode instead of the network operator's own identification, select **Options** > **Save**.

Calen. entry—To save the invitation, select Options > Save to Calendar.

Web message—To save the bookmark to the bookmarks list in Web, select Options > Add to bookmarks. If the message contains both access point settings and bookmarks, to save the data, select Options > Save all.

E-mail notif.—The note tells you how many new e-mail messages you have in your remote mailbox. An extended notification may list more detailed information.

Web service messages

Web service messages () are notifications (for example, news headlines) and may contain a text message or a link.

For availability and subscription, contact your service provider.

My folders

In My folders, you can organise your messages into folders, create new folders, and rename and delete folders.

Tip! You can use texts in the templates folder to avoid rewriting messages that you send often.

Mailbox

If you select Mailbox and have not set up your e-mail account, you are prompted to do so. To start creating the e-mail settings with the mailbox guide, select Start. See also 'E-mail', p. 51.

When you create a new mailbox, the name you give to the mailbox replaces Mailbox in the Messaging main view. You can have up to six mailboxes.

Open the mailbox

When you open the mailbox, the device asks if you want to connect to the mailbox (Connect to mailbox?).

To connect to your mailbox and retrieve new e-mail headings or messages, select Yes. When you view messages online, you are continuously connected to a remote mailbox using a data connection. See also 'Connection', p. 103.

To view previously retrieved e-mail messages offline, select No. When you view e-mail messages offline, your device is not connected to the remote mailbox.

Retrieve e-mail messages

If you are offline, select **Options** > **Connect** to start a connection to a remote mailbox.

Important: Excercise caution when opening messages. E-mail messages may contain malicious software or otherwise be harmful to your device or PC.

 When you have an open connection to a remote mailbox, select Options > Retrieve e-mail and one of the following:

New-to retrieve all new e-mail messages Selected-to retrieve only the e-mail messages that have been marked

All-to retrieve all messages from the mailbox To stop retrieving messages, select Cancel.

2 After you retrieve the e-mail messages, you can continue viewing them online, or select Options > Disconnect to close the connection and view the e-mail messages offline. E-mail status indicators: The new e-mail (offline or online mode) has not been retrieved to your device.

a The new e-mail has been retrieved to your device.

The e-mail message has been read, and it has not been retrieved to your device.

a The e-mail message has been read.

 \swarrow The e-mail heading has been read and the message content has been deleted from the device.

3 To open an e-mail message, press the joystick. If the e-mail message has not been retrieved and you are offline, you are asked if you want to retrieve this message from the mailbox.

To view e-mail attachments, open a message that has the attachment indicator (), and select Options > Attachments. If the attachment has a dimmed indicator, it has not been retrieved to the device; select Options > Retrieve. In the Attachments view, you can retrieve, open, save, or remove attachments. You can also send attachments using Bluetooth connectivity.

Tip! If your mailbox uses the IMAP4 protocol, you can define how many messages to retrieve, and whether to retrieve the attachments. With the POP3 protocol, the options are Headers only, Size limit, or Msgs. & attachs..

Retrieve e-mail messages automatically

To retrieve messages automatically, select Options > Email settings > Automatic retrieval > Header retrieval > Always enabled or Only in home net., and define when and how often the messages are retrieved.

Retrieving e-mail messages automatically may increase your call costs due to the data traffic.

Delete e-mail messages

To delete the contents of an e-mail message from the device while still retaining it in the remote mailbox, select **Options > Delete.** In **Delete msg. from:**, select **Phone only.**

The device mirrors the e-mail headings in the remote mailbox. Although you delete the message content, the e-mail heading stays in your device. If you want to remove the heading as well, you must first delete the e-mail message from your remote mailbox, then make a connection from your device to the remote mailbox again to update the status.

To delete an e-mail from the device and the remote mailbox, select **Options** > **Delete**. In **Delete msg. from:**, select **Phone and server**. If you are offline, the e-mail is deleted first from your device. During the next connection to the remote mailbox, it is automatically deleted from the remote mailbox. If you are using the POP3 protocol, messages marked to be deleted are removed only after you have closed the connection to the remote mailbox.

Disconnect from the mailbox

When you are online, select **Options** > **Disconnect** to end the packet data connection to the remote mailbox.

Tip! You can also leave your mailbox connection open and the new e-mails (Headers only as default) will be retrieved from the remote mailbox to your device automatically (only if the IMAP IDLE function is supported by your server). To leave the messaging application open in the background, press for twice. Leaving the connection open may increase your call costs due to the data traffic.

View e-mail messages when offline

When you open Mailbox the next time and you want to view and read the e-mail messages offline, answer No to the Connect to mailbox? query. You can read the previously retrieved e-mail headings, the retrieved e-mail messages, or both. You can also write new, reply to, or forward e-mail to be sent the next time you connect to the mailbox.

Outbox-messages waiting to be sent

Outbox is a temporary storage place for messages waiting to be sent.

Status of the messages in **Outbox** are as follows:

Sending—A connection is being made, and the message is being sent.

Waiting/Queued—The message will be sent when previous messages of a similar type have been sent.

Resend at (time)—The device will try to send the message again after a time-out period. Select Send to restart the sending immediately.

Deferred—You can set documents to be on hold while they are in **Outbox**. Scroll to a message that is being sent, and select **Options** > **Defer sending**.

Failed—The maximum number of sending attempts has been reached. Sending has failed. If you were trying to send a text message, open the message, and check that the Sending options are correct. Stample: Messages are placed in the outbox, for example, when your device is outside network coverage. You can also schedule e-mail messages to be sent the next time you connect to your remote mailbox.

View messages on a SIM card

Before you can view SIM messages, you must copy them to a folder in your device.

- In the Messag. main view, select Options > SIM messages.
- Select Options > Mark/Unmark > Mark or Mark all to mark messages.
- 3 Select Options > Copy. A list of folders opens.
- 4 To start copying, select a folder and OK. To view the messages, open the folder.

Messaging settings

Fill in all fields marked with **Must be defined** or with a red asterisk. Follow the instructions given by your service provider. You may also obtain settings from your service provider in a configuration message.

Some or all message centers, access points or other settings may be preset for your device by your service provider or network operator, and you may not be able to change, create, edit, or remove them.

Text messages

Press *G* , and select Messag. > Options > Settings > Text msg. and from the following:

Message centres—View a list of all text message centers that have been defined.

Msg. centre in use–Select which message center is used to deliver text messages.

SMS e-mail—To send and receive text messages to and from e-mail addresses, enter the e-mail gateway and e-mail message center.

Character encoding – To use character conversion to another encoding system when available, select Reduced support.

Receive report-Select whether the network sends delivery reports on your messages (network service).

Message validity—Select how long the message center resends your message if the first attempt fails (network service). If the recipient cannot be reached within the validity period, the message is deleted from the message center.

Message sent as—Change this option only if you are sure that your message center is able to convert text messages into these other formats. Contact your network operator. Preferred conn.—Select the connection used for sending text messages: GSM network or packet data, if supported by the network. See 'Connection', p. 103.

Reply via same ctr.—Select whether you want the reply message to be sent using the same text message center number (network service).

Add new and edit text message centers

Note that if you change your SIM card, the list of available text message centers is updated according to the centers on the new SIM card. Message centers may also be preset in your device by your service provider, and you may not be able to create, edit, or delete them.

- 1 Select Message centres > Options > New msg. centre or Edit.
- 2 Press the joystick, write a name for the message center, and select OK.
- **3** Scroll down, press the joystick, and write the number of the text message center. You receive the number from your service provider.
- 4 Select OK.
- 5 To use the new settings, go back to the settings view. Scroll to Msg. centre in use, and select the new message center.

Multimedia messages

Press *S* , and select Messag. > Options > Settings > Multimedia message and from the following:

Image size—Define the size of the image in a multimedia message: Original (shown only when the MMS creation mode is set to Guided or Free), Small, or Large.

MMS creation mode—If you select Guided, the device informs you if you try to send a message that may not be supported by the recipient. Select Restricted; the device prevents you from sending messages that may not be supported.

Access point in use–Select which access point is used as the preferred connection for the multimedia message center.

Multimedia retrieval—Select how you want to receive multimedia messages. To receive multimedia messages automatically in your home network, select Auto. in home network. Outside your home network, you receive a notification that there is multimedia message that you can retrieve in the multimedia message center.

When you are outside your home network, sending and receiving multimedia messages may cost you more.

If you select Multimedia retrieval > Always automatic, your device automatically makes an active packet data connection to retrieve the message both in and outside your home network.

Allow anon. msgs.—Select whether you want to reject messages from an anonymous sender.

Receive adverts—Define whether you want to receive multimedia message advertisements.

Receive report—Select whether you want the status of the sent message to be shown in the log (network service). Receiving a delivery report of a multimedia message that has been sent to an e-mail address may not be possible.

Deny report sending—Select whether you want to deny your device sending delivery reports of received multimedia messages.

Message validity—Select how long the message center resends your message if the first attempt fails (network service). If the recipient cannot be reached within the validity period, the message is deleted from the message center.

Tip! You may also obtain the multimedia and e-mail settings from your service provider in a configuration message. Contact your service provider for more information. See 'Data and settings', p. 44.

E-mail

Press *G* , and select Messag. > Options > Settings > Email and from the following:

Mailboxes—Select a mailbox to change the following settings: Connection settings, User settings, Retrieval settings, and Automatic retrieval.

Mailbox in use – Select which mailbox you want to use for sending e-mail.

To create a new mailbox, select **Options** > **New mailbox** in the mailbox main view.

Connection settings

To edit the settings for the e-mail you receive, select **Incoming e-mail** and from the following:

User name—Enter your user name, given to you by your service provider.

Password—Enter your password. If you leave this field blank, you are prompted for the password when you try to connect to your remote mailbox.

Incoming mail serv.—Enter the IP address or host name of the mail server that receives your e-mail.

Access point in use–Select an Internet access point (IAP). See 'Connection', p. 103.

Mailbox name-Enter a name for the mailbox.

Mailbox type—Defines the e-mail protocol that your remote mailbox service provider recommends. The options are POP3 and IMAP4. This setting can be selected only once and cannot be changed if you have saved or exited from the mailbox settings. If you use the POP3 protocol, e-mail messages are not updated automatically when you are online. To see the latest e-mail messages, you must disconnect and make a new connection to your mailbox.

Security (ports)—Select the security option used to secure the connection to the remote mailbox.

Port–Define a port for the connection.

APOP secure login (for POP3 only)—Use with the POP3 protocol to encrypt the sending of passwords to the remote e-mail server while connecting to the mailbox.

To edit the settings for the e-mail you send, select Outgoing e-mail and from the following:

My e-mail address—Enter the e-mail address given to you by your service provider. Replies to your messages are sent to this address.

Outgoing mail serv.—Enter the IP address or host name of the mail server that sends your e-mail. You may only be able to use the outgoing server of your network operator. Contact your service provider for more information.

Access point in use–Select an Internet access point (IAP). See 'Connection', p. 103. The settings for User name, Password, Security (ports), and Port are similar to the ones in Incoming e-mail.

User settings

My name—Enter your own name. Your name replaces your e-mail address in the recipient's device when the recipient's device supports this function.

Send message—Define how e-mail is sent from your device. Select Immediately for the device to connect to the mailbox when you select Send message. If you select During next conn., e-mail is sent when the connection to the remote mailbox is available.

Send copy to self-Select whether you want to save a copy of the e-mail to your remote mailbox and to the address defined in My e-mail address.

Include signature—Select whether you want to attach a signature to your e-mail messages.

New e-mail alerts—Select whether you want to receive the new e-mail indications, a tone and a note, when new mail is received to the mailbox.

Retrieval settings

E-mail to retrieve—Define which parts of the e-mail are retrieved: Headers only, Size limit, Messages (for IMAP4 only), or Msgs. Et attachs..

Retrieval amount-Define how many new e-mail messages are retrieved to the mailbox.

IMAP4 folder path (for IMAP4 only)—Define the folder path for folders to be subscribed.

Folder subscriptions (for IMAP4 only)–Subscribe to other folders in the remote mailbox and retrieve content from those folders.

Automatic retrieval

Header retrieval—Select whether you want the device to retrieve new e-mail automatically. You can define when, and how often, the messages are retrieved.

Retrieving e-mail messages automatically may increase your call costs due to the data traffic.

Web service messages

Press *G* , and select Messaging > Options > Settings > Service message. Select whether you want to receive service messages. If you want to set the device to automatically activate the browser and start a network connection to retrieve content when you receive a service message, select Download messages > Automatically.

Cell broadcast

Check the available topics and related topic numbers with your service provider. Press $\{g^{o}, and select Messaging > Options > Settings > Cell broadcast and from the following:$

Reception—Select whether you want to receive cell broadcast messages.

Language—Select the languages in which you want to receive messages: All, Selected, or Other.

Topic detection—Select whether the device automatically searches for new topic numbers, and saves the new numbers without a name to the topic list.

Other settings

Press *G* , and select Messaging > Options > Settings > Other and from the following:

Save sent messages—Select whether you want to save a copy of the text messages, multimedia messages, or e-mail that you send to the Sent folder.

No. of saved msgs.—Define how many sent messages are saved to the Sent folder at a time. The default limit is 20 messages. When the limit is reached, the oldest message is deleted. Memory in use-Select the memory where you want to save your messages: Phone memory or Hard drive.

Media applications

Camera

The Nokia N91 supports an image capture resolution of 1600 x 1200 pixels. The image resolution in these materials may appear different.

To activate the camera, press *f* in the Standby view, and select **Camera**. The camera starts, and you can see the view to be captured.

If the camera is in Video mode, move the joystick to the left to start Image mode.

The images are automatically saved in the gallery in .jpg format. You can send images in a multimedia message as an e-mail attachment or by using Bluetooth connectivity.

Take pictures

To take a picture, press the joystick. Do not move the device before the image is saved. The image is saved automatically in the **Images** folder of **Gallery**. See 'Gallery', p. 58.

Saving the captured image may take longer if you change the zoom, lighting, or colour settings.

When taking a picture, note the following:

- To keep the camera still, use both hands.
- To adjust colour before taking a picture, select Options > Adjust > White balance or Colour tone. See 'Adjust colour', p. 55.
- The quality of a zoomed picture is lower than that of a nonzoomed picture.
- The camera goes into battery saving mode if there are no key presses for a moment. To continue taking pictures, press the joystick.

After the image is taken:

- To discard the image, select **Options** > **Delete**.
- To send the image Via multimedia, Via e-mail, or Via Bluetooth, select Options > Send. For more information, see 'Messaging', p. 38 and 'Bluetooth connectivity', p. 90.
- To send an image to the other party during an active call, select Options > Send MMS.

Exposure modes

 To set the camera to take six pictures in a sequence, select Options > Sequence mode. You can also use the sequence mode with the Self-timer. See 'You in the picture-self-timer', p. 55. The pictures are automatically saved in Gallery.

After you take the pictures, they are shown in a grid on the main display. To view a picture, press the joystick to open it.

 To set the camera to take pictures in low light conditions, select Options > Night mode

You in the picture-self-timer

Use the self-timer to delay the capture so that you can include yourself in the picture. To set the self-timer delay, select **Options > Self-timer > 10 seconds, 20 seconds, or 30 seconds.** To activate the self-timer, select **Activate.** The self-timer indicator (\bigotimes) blinks and the device beeps when the timer is running. The camera takes the picture after the selected delay elapses. You can also use the **Self-timer** in the sequence mode. See 'Exposure modes', p. 54.

Adjust colour

To enable the camera to reproduce colours more accurately, or to add effects to your pictures or videos, select **Options** > **Adjust**, and select from the following options:

White balance—Select the current lighting condition from the list. This allows the camera to reproduce colours more accurately.

Colour tone-Select a colour effect from the list.

The screen display changes to match any settings made, showing you how the change affects the pictures or videos.

The settings return to the default settings when you close the camera.

Adjust still image camera settings

To change the main settings, select **Options** > **Settings**. These settings remain the same until you change them. Select from the following options:

Image quality–High, Normal, or Basic. The better the image quality, the more memory the image consumes.

Image resolution—Select the resolution you want to use. The higher the image resolution, the more memory the image consumes. The quality of a zoomed picture is lower than that of a nonzoomed picture.

Default image name— Set a name for the pictures taken. For example, if you set Beach as the default name, Camera will name the pictures you take Beach, Beach(001), Beach(002), and so on, until you change the setting again.

Show captured img.—Select Yes if you want to see the captured image after it is taken, or No if you want to continue taking pictures immediately.

Memory in use-Select where to store your images.

Viewfinder

Viewfinder shows the following:

The Memory in use indicator (1) shows where the images are currently stored: in device memory \blacksquare or in hard drive \boxdot .

The images counter (2) on top of the viewfinder shows an estimate of how many images, depending on the selected image quality, can fit in the remaining memory of your device.

-The zoom indicator (3) shows the zoom level. Move the joystick up and down to zoom in and zoom

out.

C – The Night mode

indicator (4) shows that the camera has been optimized for low-light photography.

□____The Sequence mode

indicator (5) shows that the camera is in sequence mode.

O—The self-timer indicator (6) shows that the self-timer is activated. See 'You in the picture—self-timer', p. 55.



Tips on taking good photographs

Picture quality

Use the appropriate picture quality. The camera has three picture quality modes (High, Normal, and Basic). Use the High setting to make sure that the camera produces the best picture quality available. Note however, that better picture quality requires more storage space. For MMS and e-mail attachments it may be necessary to use Normal, or Basic setting. You can define the quality in Options > Settings.

Background

Use a simple background. For portraits and other pictures with people, avoid having your subject in front of a cluttered, complex background that may distract attention from the subject. Move the camera, or the subject, when these conditions cannot be met. Move the camera closer to the object to take clearer portraits.

Depth

When shooting landscapes and sceneries, add depth to your pictures by placing objects in the foreground. If the foreground object is too close to the camera, it may be blurred.

Lighting conditions

Changing the source, amount, and direction of light can change photographs dramatically. Here are some typical lighting conditions:

- Light source behind the subject. Avoid placing your subject in front of a strong light source. If the light source is behind the subject or visible in the display, the resulting picture may have weak contrast, may be too dark, and may contain unwanted light effects.
- Sidelit subject. Strong side light gives a dramatic effect but may be too harsh, resulting in too much contrast.
- Light source in front of the subject. Harsh sunlight may cause the subjects to squint their eyes. The contrast may also be too high.
- **Optimal lighting** is found in situations where there is plenty of diffused, soft light available, for example, on a bright, partially cloudy day or on a sunny day in the shadow of trees.

Record videos

To activate the camera, Press *(*), and select Camera. The camera starts, and you can see the view to be captured.

If the camera is in **Image** mode, open the video recorder view by moving the joystick right.

To adjust colour before recording a video, select Options > Adjust > White balance or Colour tone. See 'Adjust colour', p. 55.

- Press the joystick to start recording. The red record icon is shown and a tone sounds, indicating to the subject that video is being recorded.
- 2 To pause recording at any time, select Pause. The pause icon \prod blinks on the display. Video recording automatically stops if the recording is set to pause and there are no key presses within a minute.
- 3 Select Continue to resume recording.
- 4 Select Stop to stop recording. The video clip is automatically saved to the Video clips folder of Gallery. See 'Gallery', p. 58.

Viewfinder indicators show the following:

 \mathscr{G} —The microphone indicator shows that the microphone is muted.

-The zoom indicator shows the zoom level. Move the joystick up and down to zoom in and out.

After a video clip is recorded:

- To immediately play the video clip you just recorded, select Options > Play.
- To discard the video, select **Options** > **Delete**.

- To return to the viewfinder to record a new video, press the joystick.
- To send the video, select Options > Send > Via multimedia, Via e-mail, or Via Bluetooth. For more information, see 'Messaging', p. 38 and 'Bluetooth connectivity', p. 90.
- To send a video clip to the other party during an active call, select Options > Send MMS.

Video settings

There are two kinds of settings for the video recorder: temporary settings and default settings. To adjust contrast, brightness and colour settings, see 'Adjust colour', p. 55. The temporaray settings return to the default settings after you close the camera, but the default settings remain the same until you change them again. To change the default settings, select **Options** > **Settings** and from the following:

Length-To optimize video clip for MMS, select Short.

Video resolution—High(CIF, 352x288), Normal(QCIF 176x144), or Basic (SubQCIF 128x96). The higher the resolution, the more memory the video consumes.

Default video name:—Set a name for the video taken. Select **Date** or **Text**. If you select **Text**, the videos are named in the format Video by default. For example, if you set Beach as the default name, Camera will name the video clips you take Beach, Beach(01), Beach(02), and so on, until you change the setting again.



To store and organise your images, video clips, sound clips, playlists, and streaming links, press $\{g\}$, and select Media > Gallery. To open the gallery in the camcorder select Options > Go to Gallery.

Select Images, Video clips, Tracks, Sound clips, Streaming links, or All files, and press the joystick to open it.

You can browse and open folders, and mark, copy, and move items to folders. You can also create folders, and mark, copy, and add items to folders. See 'Folders', p. 59.

Tip! You can transfer images from your device to a compatible PC with Nokia Phone Browser available in Nokia PC Suite. See the CD-ROM supplied with your device.

Press the joystick to open a file. Video clips, .ram files, and streaming links are opened and played in the RealPlayer application and sound clips in the Music Player application. For more information, see 'RealPlayer™', p. 60, 'Music player', p.18. and 'View images and video clips', p. 59.

To rename a file, select a file and **Options** > **Rename**.

To download files into Gallery in one of the main folders using the browser, select Graphic downl. or Video downl., Track downl., or Sound downl.. The browser opens, and you can select a bookmark from which the site can download.

View images and video clips

Photos taken are stored in the **Images** folder and video clips are stored in the **Video clips** folder in **Gallery**. Images and video clips can also be sent to you in a multimedia message, as an e-mail attachment, or through a Bluetooth connection. To be able to view a received image or video clip in the gallery or in the media player, you must save it.

Open the **Images** or **Video clips** folder in **Gallery**. To browse the files, scroll up or down and press the joystick to open a file for viewing.

To delete an image or a video clip, press \Box .

Presentations

With presentations, you can view SVG (scalable vector graphics) files, such as cartoons and maps. SVG images maintain their appearance when printed or viewed with different screen sizes and resolutions. To view SVG files,

select the Presentations folder, scroll to an image, and select Options > Play.

To zoom in, press 5. To zoom out, press 0.

To switch between full screen and normal screen, press *.

Folders

With folders you can conveniently manage your images and video clips.

To create a new folder, select **Options** > **Organise** > **New folder**. Enter a name for the folder, and select OK.

To add a picture or a video clip to an folder in the gallery, scroll to a picture or video clip, and select Options > Organise > Copy to hard drive / Copy to phone mem. or Move to hard drive / Move to phone mem. depending on the current location of the file. A list of folders opens. Select the folder to which you want to add the picture or video clip, and press the joystick.

To remove a file from an folder, press \Box .

Music player

See 'Music player' on p.18 for details.

> RealPlayer[™]

Press *§* , and select Media > RealPlayer. With RealPlayer, you can play video clips or stream media files over the air. You can activate a streaming link when you browse Web pages or store it in the hard drive.

RealPlayer supports files with extensions such as .awb or .m4a, but not all the variations of file formats. For example, some .mp4 files may include content that is not compliant with 3GPP standards and, therefore, cannot be opened.

⇒ Tip! You can transfer music files from your device to your hard drive with Nokia PC Suite. See the CD-ROM supplied with your device.

Play video

- To play a media file stored in phone memory, or on the hard drive, select Options > Open and select: Most recent clips—To play one of the last six files played in RealPlayer. Saved clip—To play a file saved in Gallery. See 'Gallery', p. 58.
- 2 Scroll to a file, and press the joystick to play the file.
- **Tip!** To view a video clip in full screen mode, press
- ${\bf 2}\,$. Press again to change back to normal screen mode.

Stream content over the air

Many service providers require you to use an Internet access point (IAP) for your default access point. Other service providers allow you to use a WAP access point.

The access points may be configured when you first start your device.

Contact your service provider for more information.

In RealPlayer, you can only open an rtsp:// URL address. However, RealPlayer will recognise an http link to a .ram file.

To stream content over the air, select a streaming link saved in Gallery, on a Web page, or received in a text message or multimedia message. Before live content begins streaming, your device connects to the site and starts loading the content. The content is not saved in your device.

Receive RealPlayer settings

You may receive **RealPlayer** settings in a special text message from the network operator or service provider. See 'Data and settings', p. 44. For more information, contact your network operator or service provider.

Change the RealPlayer settings

Select **Options** > **Settings** and from the following:

Video—To adjust the contrast of the video and to have RealPlayer automatically repeat video clips after they finish playing.

Connection—To select whether to use a proxy server, change the default access point, and set the port range used when connecting. Contact your service provider for the correct settings.

Proxy sett.:

- Use proxy-Select Yes.
- Proxy serv. address—Enter the IP address of the proxy server.
- Proxy port number—Enter the port number of the proxy server.
- **Glossary:** Proxy servers are intermediate servers between media servers and their users. Some service providers use them to provide additional security or speed up access to browser pages that contain sound or video clips.

Netw. sett.:

- Default access point—Scroll to the access point you want to use to connect to the Internet, and press the joystick.
- Online time-Set the time for RealPlayer to disconnect from the network when you have paused a media clip

playing through a network link, select User defined, and press the joystick. Enter the time, and select OK.

- Lowest UDP port—Enter the lowest port number of the servers port range. The minimum value is 6970.
- Highest UDP port—Enter the highest port number of the servers port range. The maximum value is 32000.
 Select Options > Advanced settings to edit the bandwidth values for different networks.

FL

FlashPlayer

With Flash player, you can view, play, and interact with flash files made for mobile

devices.

Organise flash files

Press 🚱 , and select Media >Flash Player. Scroll right.

To open a folder or play a flash file, scroll to it, and press the joystick.

To copy a flash file to another folder, select **Options** > **Organise** > **Copy to folder**.

To move a flash file to another folder, select Options > Organise > Move to folder

To create a folder to organize your flash files, select Options > Organise > New folder.

The available options may vary.

To delete a flash file, scroll to it, and press $\hfill\square$.

Play flash files

Press \$, and select Media >Flash Player. Scroll to a flash file and press the joystick.

Select **Options** and from the following:

Note: Options may not be available in all flash files.

- Pause to pause the playback.
- Stop to stop the playback.
- Volume to adjust the playback volume. To increase or decrease the volume use the side volume key on the left side of the device.
- Quality to select the playback quality. If the playback appears uneven and slow, change the Quality setting to Normal or Low.
- Full screen to play the file using the entire display. To return to the normal screen, select Normal screen. Even though not visible in full screen, the key functions may still be available when you press either key below the display.
- Fit to screen to play the file in its original size after zooming it.
- Pan mode on to be able to move around the display with the joystick when you have zoomed in.

The available options may vary.



Recorder

Press *G* , and select Media > Recorder to record telephone conversations and voice memos. If you are recording a telephone conversation, both parties hear a tone every 5 seconds during recording.

The recorder cannot be used when a data call or GPRS connection is active.



Press **G** , and select Media > Radio. You can use the application as a traditional FM radio with automatic tuning and saved stations, or with parallel visual information related to the radio program on the display, if you tune to stations that offer Visual Radio service. The Visual Radio service uses packet data (network service). You can listen to the FM radio while using other applications.

If you do not have access to the Visual Radio service, the operators and radio stations in your area do not necessarily

support Visual Radio. The Visual Radio service may not be available in all areas and countries.

You can normally make a call or answer an incoming call while listening to the radio. The radio is muted when there is an active call.

The radio selects the used frequency band based on the country information received from the network. If this information is not available, you may be asked to select the region where you are located, or you can select the region in the Visual Radio settings.

Listen to the radio

Note that the quality of the radio broadcast depends on the coverage of the radio station in that particular area.

The FM radio depends on an antenna other than the wireless device antenna. A compatible headset or enhancement needs to be attached to the device for the FM radio to function properly.

Press $\{g\}$, and select Media > Radio. To start a station search, select $| \mathbf{x} | \mathbf{x} |$ and press the joystick. To change the frequency manually, select Options > Manual tuning.

If you have previously saved radio stations, select | H or on the display and press the joystick to go to the next or previous saved station, or press the corresponding number key to select the memory location of a station.

To adjust the volume, press and hold \bigcirc or \triangle on the left side of the device. To listen to the radio using the loudspeaker, select **Options > Activate loudspeaker**.

To view available stations based on location, select Options > Station directory (network service).

To save the current tuned station to your station list, select **Options** > **Save station**. To open the list of your saved stations, select **Options** > **Stations**.

To return to the standby mode and leave the FM radio playing in the background, select **Options** > **Play in background**.

View visual content

To check availability and costs and to subscribe to the service, contact your network operator or service provider.

To view available visual content for a tuned station, select or Options > Start visual service. If the visual service ID has not been saved for the station, enter it, or select Retrieve to search for it in the station directory (network service).

When the connection to the visual service is established, the display shows the current visual content.

To adjust display settings for the visual content view, select **Options** > **Display settings**.

Saved stations

You can save up to 20 radio stations in the radio. To open your station list, select **Options** > **Stations**.

To listen to a saved station, select **Options** > **Station** > **Listen**. To view available visual content for a station with Visual Radio service, select **Options** > **Station** > **Start visual service**.

To change station details, select **Options** > **Station** > **Edit**.

Settings

Select **Options** > **Settings** and from the following:

Start-up tone—Select whether a tone is played when the application is started.

Auto-start service—Select Yes to have the Visual Radio service start automatically when you select a saved station that offers visual service.

Access point—Select the access point used for the data connection. You do not need an access point to use the application as an ordinary FM radio.

Current region—Select the region you are currently located in. This setting is displayed only if there was no network coverage when the application was started.

My own

IM—instant messaging (chat)

Press G , and select My Own > IM.

Instant messaging (network service) allows you to converse with other people using instant messages and join discussion forums (IM groups) with specific topics. Various service providers maintain IM servers that you can log in to after you register to an IM service. Service providers may differ in their support of features.

Select Conversations to start or continue a conversation with an IM user; IM contacts to create, edit, or view the online status of your IM contacts; IM groups to start or continue a group conversation with multiple IM users; or Record. chats to view a previous instant messaging session that you saved.

Check the availability of services, pricing, instructions, and fees with your network operator or service provider.

Receive IM settings

You must save the settings to access the service that you want to use. You may receive the settings in a special text

message from the network operator or service provider that offers the IM service. See 'Data and settings', p. 44. You can also enter the settings manually. See 'IM server settings', p. 69.

Connect to an IM server

- To connect to the IM server in use, open IM, and select Options > Login. To change the IM server in use and save new IM servers, see 'IM server settings', p. 69.
- 2 Enter your user ID and password, and press the joystick to log in. You obtain the user ID and password for the IM server from your service provider.
- **3** To log out, select **Options** > **Logout**.

Modify your IM settings

Select **Options** > **Settings** > **IM** settings and from the following:

Use screen name (shown only if IM groups are supported by the server)—To enter a nickname, select Yes.

Allow messages from—To allow messages from all, select All.

Allow invitations from—To allow invitations only from your IM contacts, select IM contacts only. IM invitations are sent by IM contacts who want you to join their groups.

Msg. scrolling speed–Select the speed at which new messages are displayed.

Sort IM contacts-Select how your IM contacts are sorted: Alphabetically or By online status.

Availabil. reloading—To select how to update information about whether your IM contacts are online or offline, select Automatic or Manual.

Offline contacts-Select whether IM contacts with an offline status are shown in the IM contacts list.

Own message colour—Select the color of the instant messages you send.

Received msg colour–Select the color of the instant messages you receive.

IM alert tone—Change the tone played when you receive a new instant message.

Search for IM groups and users

To search for groups, in the IM groups view, select Options > Search. You can search by Group name, Topic, and Members (user ID). To search for users, in the IM contacts view, select Options > New IM contact > Search from server. You can search by User's name, User ID, Phone number, and E-mail address.

Join IM groups

The IM groups view shows a list of the IM groups that you have saved or are currently joined to.

To join a saved IM group, press the joystick.

To join an IM group that is not on the list, but for which you know the group ID, select **Options** > Join new group.

To leave the IM group, select **Options** > Leave IM group.

Chat

After you join an IM group, you can view the messages that are exchanged there, and send your own messages.

To send a message, write the message in the message editor field, and press the joystick.

To send a private message to a participant, select **Options > Send private msg.**

To reply to a private message sent to you, select the message and **Options** > **Reply**.

To invite IM contacts who are online to join the IM group, select **Options** > **Send invitation**.

To prevent receiving messages from certain participants, select **Options** > **Blocking options** and the desired option.

Record chats

To record the messages that are exchanged during a conversation or while you are joined in a IM group, select **Options** > **Record chat.** To stop recording, select **Options** > **Stop recording.** To view the recorded chats, in the main view, select **Record. chats.**

View and start conversations

The **Conversations** view shows a list of the individual conversation participants that you have an ongoing conversation with. Ongoing conversations are automatically closed when you exit **IM**.

To view a conversation, scroll to a participant, and press the joystick.

To continue the conversation, write your message, and press the joystick.

To return to the conversations list without closing the conversation, select **Back**. To close the conversation, select **Options > End conversation**.

To start a new conversation, select **Options** > **New conversation**.

To save a conversation participant to your IM contacts, select **Options > Add to IM contacts**.

To send automatic replies to incoming messages, select **Options** > **Set auto reply on**. You can still receive messages.

IM contacts

In the IM contacts view, you can retrieve IM contact lists from the server, or add a new IM contact to a contact list. When you log in to the server, the previously used IM contact list is retrieved from the server automatically.

To create a new contact, select **Options** > **New IM contact** > **Enter manually.** Fill in the **Nickname** and **User ID** fields, and select **Done**.

To move a contact from a list on the server to the retrieved list, select Options > New IM contact > Move from other list.

To change the IM contact list, select **Options** > **Change contact list**.

Select from the following options:

Open conversation—To start a new conversation or continue an ongoing conversation with the contact.

Switch tracking on-To have the device notify you every time the IM contact goes online or offline.

Belongs to groups—To see which groups the IM contact has joined.

Reload users' availab.—To update information about whether the contact is online or offline. The online status is shown by an indicator next to the contact name. This option is not available if you have set the Availabil. reloading to Automatic in IM settings.

Manage IM groups

Select IM groups view to see a list of the IM groups that you have either saved or are currently joined to.

Scroll to a group, select **Options** > **Group** and one of the following:

Save—To save an unsaved group that you are currently joined to.

View participants—To see who is currently joined to the group.

Details—To see the group ID, topic, participants, administrators of the group (shown only if you have the editing rights), the list of blocked participants (shown only if you have the editing rights), and whether private conversations are allowed in the group.

Settings—To view and edit the IM group settings. See 'Create a new IM group', p 68.

Create a new IM group

Select IM groups > Options > Create new group. Enter the settings for the group.

You can edit the settings for an IM group if you have administrator rights to the group. The user who creates a group is automatically given administrator rights to it.

Group name, Group topic, and **Welcome note**—To add details that the participants see when they join the group.

Group size—To define the maximum number of members allowed to join the group.

Allow search–To define if others can find the IM group by searching.

Editing rights—To define the IM group participants to whom you want to give rights to invite contacts to join the IM group and edit the group settings.

Group members—See 'Add and remove group members', p. 69.

Banned list—Enter the participants that are not allowed to join the IM group.

Allow private msgs.—To allow messaging between selected participants only.

Group ID—The group ID is created automatically and cannot be changed.

Add and remove group members

To add members to a group, select IM groups, scroll to an IM group, and select **Options** > **Group** > **Settings** > **Group** members > Selected only or All.

To remove a member from the IM group, scroll to the member, and select **Options** > **Remove**. To remove all members, select Options > Remove all.

IM server settings

Select Options > Settings > Server settings. You may receive the settings in a special text message from the network operator or service provider that offers the chat service. You obtain the user ID and password from your service provider when you register to the service. If you do not know your user ID or password, contact your service provider.

Servers-View a list of all defined IM servers.

Default server-Change the IM server to which you want to connect.

IM login type—To log in automatically when you start IM, select On app. start-up.

To add a new server to your list of IM servers, select Servers > Options > New server. Enter the following settings:

Server name—the name for the IM server

Access point in use-the access point you want to use for the server

Web address—the URL address of the IM server

User ID-vour user ID

Password-your login password



Push to talk (network service)

Push to talk (PTT) is a real-time voice over IP service implemented over a GSM/GPRS network. Push to talk provides direct voice communication connected with the push of a key. Use push to talk to have a conversation with one person or with a group of people.

Before you can use push to talk, you must define the push-to-talk access point and push-to-talk settings. You may receive the settings in a special text message from the service provider that offers the push-to-talk service.

Press Press , and select My Own > Push to talk.

In push-to-talk communication, one person talks while the others listen through the built-in loudspeaker. Speakers take turns responding to each other. Because only one group member can talk at any time, the

maximum duration of a speech turn is limited. The maximum duration is usually set to 30 seconds. For details of the speech turn duration for your network, contact your network operator or service provider.

Warning: Be sure to hold the device in front of you and not to your ear. The loudspeaker is used to listen. Continuous exposure to high volume may damage your hearing.

Phone calls always take priority over push-to-talk activities.

Define a push-to-talk access point

Many service providers require you to use an Internet access point (IAP) for your default access point. Other service providers allow you to use a WAP access point. Contact your service provider for more information.

If you do not have a WAP connection, you may need to contact your service provider for assistance with the first-time connection or visit www.nokia.com/phonesettings.

Push-to-talk settings

Press $\{j\}$, and select My Own > Push to talk > Options > Settings. Enter the following information: User settings:

Incoming PTT calls—Select Notify if you want to see a notification of incoming calls. Select Auto-accept if you want PTT calls to be answered automatically. Select Not allowed if you want PTT calls to be rejected automatically.

PTT call alert tone—Select Set by profile if you want the incoming call alert setting for push to talk to follow your profile settings. For example, if your profile is silent, push to talk is set to do not disturb (DND) and, except for callback requests, you are not available to others using push to talk.

Callback request tone—Select a tone for callback requests.

Application start-up-Select if you want to log in to the Push-to-talk service when you switch on your device.

Default nickname—Enter your default nickname (20 characters maximum) that is displayed to other users. Your service provider may have disabled this option in your device. For more information, contact your network operator or service provider.

Show my PTT address–Select In 1 to 1 calls, In group calls, In all calls, or Never. Your service provider may have disabled this option in your device. For more information, contact your network operator or service provider.

Show my login status—Select Yes whether you want your status to be shown or No if you want your status to be hidden.

Connection settings:

Domain-Enter the domain name obtained from your service provider.

Access point name—Enter the push-to-talk access point name. The access point name is needed to establish a connection to the GSM/GPRS network.

Server address—Enter the IP address or domain name of the push-to-talk server obtained from your service provider.

User name—Enter your user name obtained from your service provider.

Password—Enter a password, if required, to make a data connection. The password is usually provided by the service provider and is often case-sensitive.

Log in to push to talk

Press *G* , and select My Own > Push to talk. Push to talk automatically logs in to the service when started.

When log in is successful, push to talk automatically connects to groups that were active when the application was last closed. If the connection is lost, the device automatically tries to log back in until you choose to exit push to talk.

Exit push to talk

Select Options > Exit. Switch Push to talk off after exiting application? is displayed. Select Yes to keep the application active on the background or No to log out and close the service.

If several applications are open and you want to switch from one application to another, press and hold $~~ \ensuremath{G^{\circ}}$.

Make a one-to-one call

Select Options > PTT contacts.

Scroll to the contact you want to talk to from the list and select **Options** > Talk 1 to 1.

Press and hold \frown the entire time you are talking. When you have finished talking, release \frown .

You must end the one-to-one call before you can create a new call. Select **Disconnect** or press **C**.

Tip! Remember to hold the device in front of you during a push-to-talk call so you can see the display. Speak towards the microphone, and do not cover the loudspeaker with your hands.

Answer a one-to-one call

Press \frown to start a one-to-one call or \frown to dismiss the call.

Tip! You can make a one-to-one or group call also from Contacts. Select Options > Talk 1 to 1 or Make PTT group call.

Make a group call

To call a group, select Options > PTT contacts, select Options > Make PTT group call, mark the contacts you want to call, and press \frown .

Subscribe login status of others

To subscribe or unsubscribe to the push-to-talk login status of others, select **Options > PTT contacts**, select the contact, select **Options > Show login statusor Hide login status**.

Send a callback request

In PTT contacts, scroll to the desired name, and select Options > Send callback request.

Respond to a callback request

When someone sends you a callback request, 1 new callback request is displayed in standby mode. Press Show to open Callback inbox. Select a contact and select Options > Talk 1 to 1 to start a one-to-one call.

Channels

You can join public preconfigured channels. Public channels are open to anyone who knows the URL for the channel.

When you are connected to a channel and talk, all members joined to the channel hear you talking. Up to five channels can be active at the same time. When more than one channel is active, use Swap to change the channel you want to talk to.

Select Options > PTT channels.

To connect to a public preconfigured channel for the first time, select **Options** > **New channel** > **Add existing.** When you join a preconfigured channel, you must fill in an URL for the channel.

Create your own channels

To create a new preconfigured channel select **Options** > **New channel** > **Create new.**

You can create your own public channels, choose your own channel name, and invite members. Those members can invite more members to the public channel.

You may also set up private channels. Only users invited by the host are allowed to join and use private channels.

For each channel, define the following: Channel name, Channel privacy, Nickname in channel, and Channel thumbnail (optional).

When you have successfully created a channel, you are asked if you want to send channel invitations. Channel invitations are text messages.

Talking to a channel

To talk to a channel after you log in to the push-to-talk service, press — . You hear a tone indicating that access is granted.

Continue to press and hold \frown the entire time you are talking. When you finish talking, release \frown .

If you try to respond to a channel by pressing r while another member is talking, Wait is displayed. Release

, wait for the other person to finish talking, and press again when the speaker has finished. Alternatively, keep pressed and wait for Talk to be displayed.

When you are talking in a channel, the first person to press when someone stops talking talks next.

When you have finished the push-to-talk call, select Disconnect or press C.

To view currently active members of a channel when you have an active call to the channel, select **Options** > Active members.

You can also invite new members to a channel when you are connected to it, select **Options** > **Send invitation** to open the invitation view. You can only invite new members when you are the host of a private channel, or when the channel is a public channel. Channel invitations are text messages.

Respond to a channel invitation

To save a received channel invitation, select **Options** > **Save PTT channel**. The channel is added to your PTT contacts, channels view.

After you save the channel invitation, you are asked if you want to connect to the channel. Select Yes to open the push-to-talk sessions view. Your device logs in to the service, if you are not logged in already.

If you reject or clear the invitation, the invitation is stored in your messaging inbox. To join the channel later, open the invitation message, and accept.

View the push-to-talk log

Press S , and select My Own > Push to talk > Options > PTT log. The log contains the following folders: Missed calls, Received calls, and Created calls.

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You can initiate a one-to-one call from PTT log by pressing ____.



Recent calls

To monitor the phone numbers of missed, received, and dialled calls, press press, and select My Own > Log > Recent calls. The device registers missed and received calls only if the network supports these functions, the device is switched on, and within the network service area.

Set Tip! When you see a note in the standby mode about missed calls, select Show to access the list of missed calls. To call back, scroll to a name or number, and press **m**.

To clear all recent call lists, select Options > Clear recent calls in the recent calls main view. To clear one of the call registers, open the register you want to erase, and select Options > Clear list. To clear an individual event, open a register, scroll to the event, and press \square .

Call duration

To monitor the approximate duration of your incoming and outgoing calls, press \mathbf{G} , and select $\mathbf{Log} > \mathbf{Call duration}$.

To set the display of the call duration while a call is active, select My Own > Log > Options > Settings > Show call duration. Select Yes or No.



Note: The actual time invoiced for calls by your service provider may vary, depending on network features, rounding off for billing, and so forth.

To clear call duration timers, select Options > Clear timers. For this you need the lock code, see 'Security', 'Phone and SIM'. p. 107.

Packet data

To check the amount of data sent and received during packet data connections, press **\$**, and select **My Own** >Log > Packet data. For example, you may be charged for your packet data connections by the amount of data sent and received.

Monitor all communication events

Icons in Log:

Incoming



Outgoing

Missed communication events

To monitor all voice calls, text messages, or data connections registered by the device, press g, select My Own > Log, and scroll right to open the general log. For each communication event, you can see the sender or recipient name, phone number, name of the service provider, or access point. You can filter the general log to view just one type of event and create new contact cards based on the log information.

- Tip! If you want to see the duration of a voice call on the main display during an active call, select Options > Settings > Show call duration > Yes.
- Tip! To view a list of sent messages, press \$\$, and select Messaging > Sent.

Subevents, such as a text message sent in more than one part and packet data connections, are logged as one communication event. Connections to your mailbox, multimedia messaging centre, or Web pages are shown as packet data connections.

To filter the log, select **Options** > **Filter** and a filter.

To erase the contents of the log, recent calls register, and messaging delivery reports permanently, select **Options** > **Clear log.** Select **Yes** to confirm.

To set the Log duration, select Options > Settings > Log duration. The log events remain in the phone memory for a set number of days after which they are automatically erased to free memory. If you select No log, all the log contents, recent calls register, and messaging delivery reports are permanently deleted.

To view the details of a communication event, in the general log view scroll to an event, and press the joystick.

Tip! In the details view you can copy a phone number to the clipboard, and paste it to a text message, for example. Select Options > Copy Number.

Packet data counter and connection timer: To view how much data, measured in kilobytes, is transferred and how long a certain packet data connection lasts, scroll to an incoming or outgoing event indicated by Pack., and select Options > View details.



Nokia Lifeblog

Nokia Lifeblog multimedia diary is a combination of software for the mobile phone and PC that keeps a multimedia diary of the items that you collect with your device. Nokia Lifeblog multimedia diary automatically organizes your photos, videos, sounds, text messages, multimedia messages, and weblog posts into a chronology that you can browse, search, share, publish, and back up. Both Lifeblog PC and Lifeblog mobile let you send or blog your items for others to see. Lifeblog mobile automatically keeps track of your multimedia items. Use Lifeblog mobile on your device to browse your items, send them to others, or publish them on the Web. Connect your device to a compatible PC using a USB data cable or Bluetooth connectivity to transfer and synchronize the items on the device with your compatible PC.

Lifeblog PC provides easy browsing and searching of the items that you collected with your device. With one-button transfer using a USB data cable or Bluetooth connectivity, your favorite photos, videos, text, and multimedia messages are transferred back to your device.

For safekeeping, you can back up your Lifeblog database using your hard disk, CDs, DVDs, removable drive, or network drive. Additionally, you can post items to your weblog (blog).

This application is only available in a limited number of languages.

To start Lifeblog mobile on your device, press $\ensuremath{\mathfrak{G}}$, and select

My own > Lifeblog > Options > Open.

Installation on your PC

Before you install Lifeblog PC on a compatible PC, you need the following:

- 1 GHz Intel Pentium or equivalent, 128 MB RAM
- 400 MB of available hard disk space (if Microsoft DirectX and Nokia PC Suite must be installed)
- Graphics capability of 1024x768 and 24-bit color
- 32 MB graphics card
- Microsoft Windows 2000 or Windows XP

To install Nokia Lifeblog on your PC:

- 1 Insert the CD-ROM.
- **2** Install Nokia PC Suite (includes Nokia Connectivity Cable Drivers for USB connection).
- 3 Install Nokia Lifeblog for PC.

If Microsoft DirectX 9.0 is not already installed on your PC, it is installed at the same time with Lifeblog PC.

Connect your device and your PC

To connect your device and a compatible PC using the USB data cable supplied with your device:

- 1 Ensure that you have installed Nokia PC Suite.
- 2 Connect the USB data cable to the device and the PC. When you connect your device to the PC for the first time after you have installed Nokia PC Suite, the PC installs the specific driver for your device. This may take a while.
- 3 Start the Lifeblog PC application.

To connect your device and a compatible PC using Bluetooth wireless technology:

- 1 Ensure that you have installed Nokia PC Suite on your PC.
- 2 Ensure that you have paired your device and the PC through Bluetooth wireless technology with Get Connected in Nokia PC Suite. See Nokia PC Suite user guide and "Bluetooth connectivity", p. 90.
- **3** Activate Bluetooth connectivity on your device and on your PC.

Copy items

When you have connected your device to a compatible PC using a USB data cable or Bluetooth connectivity, you can copy your items between your device and your PC.

To copy new or edited items from your device to your PC, and copy the selected items from your PC to your device:

- 1 Start the Lifeblog PC application.
- 2 In the Nokia Lifeblog PC application, select File > Copy from phone and to Phone.

The new items from your device are copied to your PC. The items in the **To phone** view on your PC are copied to your device.

Post to the Web

To share your best Nokia Lifeblog items, send them to your weblog on the Internet for others to see.

You must first create an account with a weblog service, create one or more weblogs that you use as the destination of your posts, and add the weblog account to Nokia Lifeblog multimedia diary. The recommended weblog service for Nokia Lifeblog is TypePad from Six Apart, www.typepad.com.

On your device, add the weblog account in Lifeblog mobile in the weblog settings. On your PC, edit accounts in the Edit log accounts window.

To post items to the Web from your device:

- 1 In Timeline or Favourites, select the items that you want to post to the Web.
- 2 Select Options > Post to Web.
- **3** If you use the feature for the first time, Lifeblog mobile retrieves a weblog list from the weblog server.
- 4 The weblog post dialog opens. Select the weblog you want to use from the Post to: list. If you have created new weblogs, to update the weblog list, select Options > Refresh blog list.
- **5** Enter a title and a caption for the post. You can also write a longer story or description in the body text field.
- 6 When everything is ready, select Options > Send.

To post items to the Web from your PC:

- 1 In Timeline or Favourites, select the items (a maximum of 50) that you want to post to the Web.
- 2 Select File > Post to the Web.... The Post to the Web window opens.
- **3** Enter a title and a caption for the post. You can also write a longer story or description in the body text field.
- 4 Select the weblog that you want to use from the Post to: list.
- **5** When everything is ready, click the **Send** button.

Import items from other sources

In addition to the .jpeg images of your imaging device, you can also import .jpeg images and .3gp and .mp4 video clips, .arm sound files, and .txt text files from other sources (such as a CD, DVD, or folders on your hard disk) into Nokia Lifeblog multimedia diary.

To import images or videos from a compatible PC to Lifeblog PC:

- 1 In Timeline or Favourites, select File > Import from PC.... The Import window opens.
- 2 Browse the list to find the image or video file, or sound or text file from the list, or navigate to other folders to find the file that you want to import. Use the Look in list to browse other drives or appliances.

- **3** Select a folder, file, or several files. You can view their content in the **Preview:** pane.
- 4 Click **Open** to import the folder (including subfolders) or selected files.

Browse timeline and favourites

When you start Lifeblog PC, you have several ways to move around in the **Timeline** and **Favourites** views. The fastest way is to grab the slider handle and move it forward or backward, fast or slow. Alternatively, click the time bar to select a date, use the **Go to date...** feature, or use the arrow keys.

More information

For more information on weblog services and their compatibility with Nokia Lifeblog multimedia diary, visit **www.nokia.com/lifeblog**, or press **F1** in Lifeblog PC to open Nokia Lifeblog Help.

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Calendar

☆ Tip! Regularly back up the phone information with Nokia PC Suite. You can restore the information, such as calendar entries, to the phone later.

Create calendar entries

- Shortcut: In the day, week, or month calendar view, press any key (1 - 0). An appointment entry opens, and the characters you enter are added to the <u>Subject</u> field. In the to-do view, a to-do note entry opens.
- 1 Press $\{g, and select My own > Calendar > Options > New entry and one of the following:$

Meeting—To remind you of an appointment that has a specific date and time.

Memo-To write a general entry for a day. Anniversary-To remind you of birthdays or special dates. Anniversary entries are repeated every year.

To-do-to remind you of a task that needs doing by a specific date

2 Fill in the fields.

Alarm (meetings, to-dos, and anniversaries)—Select On, and scroll down to fill in the Alarm time and Alarm date fields. \heartsuit in the day view indicates an alarm. Repeat-Scroll right to change the entry to be repeating (♂ is shown in the day view). Repeat until-You can set an end date for the repeated entry.

Synchronisation:

Private—After synchronisation the calendar entry can be seen only by you and it will not be shown to others with online access to view the calendar.

Public—The calendar entry is shown to others who have access to view your calendar online.

None—The calendar entry will not be copied to your PC when you synchronise.

3 To save the entry, select Done.

When the calendar alarms for a note, select Silence to turn off the calendar alarm tone. The reminder text stays on the screen. To end the calendar alarm, select Stop. To set the alarm to snooze, select Snooze.

To send a calendar note to a compatible phone, select Options > Send > Via text message, Via multimedia, Via e-mail, or Via Bluetooth.

Tip! You can move calendar and to-do data from many different Nokia phones to your phone or synchronise your calendar and to-do to a compatible

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PC using Nokia PC Suite. See the CD-ROM supplied with the phone.

Set a calendar alarm

You can set an alarm to remind you of meetings and anniversaries.

- 1 Open an entry in which you want to set an alarm, and select Alarm > On.
- 2 Set the Alarm time and Alarm date.
- **3** Scroll down to **Repeat**, and scroll right to select how often you want the alarm to be repeated.
- 4 Select Done.

To delete a calendar alarm, open the entry in which you want to delete an alarm, and select Alarm > Off.

Calendar views

☆ Tip! Select Options > Settings to change the starting day of the week or the view that is shown when you open the calendar.

To open Month view or To-do view, select Options > Month view / To-do view.

In the month view, dates that have calendar entries are marked with a small triangle at the right bottom corner. In the week view, memos and anniversaries are placed before 8 o'clock. Press * to switch between the month view, the week view, the day view, and the to-do view.

Icons in the day view:

🔚 Memo

Manniversary

There is no icon for Meeting.

To go to a certain date, select **Options** > **Go to date**, write the date, and select **OK**.

Press # to jump to today.

To-do view

Press ${}^{G}_{O}$, and select My own > Calendar > Options > Todo view to write notes and maintain a task list.

To add a note, press any number key to start to write the task in the **Subject** field.

To set the due date for the task, scroll to the **Due date** field, and enter a date.

To set the priority for the To-do note, scroll to the Priority field, and scroll right to select the priority. The priority icons are ↓ (High) and ↓ (Low). There is no icon for Normal.

To mark a task as completed, scroll to it in the To-do list, and select Options > Mark as done.

Calendar

To restore a task, scroll to it in the **To-do** list, and select **Options** > **Mark as not done**.

Remove calendar entries

Removing past entries in Calendar saves space in your phone memory.

To remove more than one event at a time, go to the month view, and select **Options** > **Delete entry** and one of the following:

Before date—Deletes all calendar entries that take place before a certain date you define

All entries-Deletes all calendar entries

Calendar settings

Scroll to the following settings and press the joystick to edit:

Calendar alarm tone—To change the alarm tone, scroll to the new tone and press the joystick.

Default view—To change the view that is displayed when you open Calendar, scroll to the desired view and press the joystick.

Week starts on—To change the first day of the week, scroll to the desired day and press the joystick.

Week view title—Select either Week number or Week dates. If you select any day other than Monday in Week starts on, the above setting is not available.

To save your settings, press Back.

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Office

Calculator

To add, substract, multiply, divide, calculate square roots and percentages, press $\{ j \}$, and select Office > Calculator.



Note: This calculator has limited accuracy and is designed for simple calculations.

To save a number in the memory (indicated by M), select **Options** > **Memory** > **Save**. To retrieve a number in memory, select **Options** > Memory > Recall. To clear a number in memory, select **Options** > Memory > Clear.

Calculate percentages

- Enter a number for which you want to calculate a 1 percentage.
- 2 Select \times \div \div or +
- **3** Enter the percentage.
- 4 Select × .



To convert measures such as Length from one unit (Yards) to another (Metres), press $\frac{1}{2}$, and select Office > Converter.

Note that **Converter** has limited accuracy, and rounding errors may occur.

- 1 Scroll to the Type field, and press the joystick to open a list of measures. Scroll to the measure you want to use, and select **OK**.
- 2 Scroll to the first Unit field, and press the joystick. Select the unit from which you want to convert and OK. Scroll to the next Unit field, and select the unit to which you want to convert.

3 Scroll to the first Amount field, and enter the value you want to convert. The other Amount field changes automatically to show the converted value. Press # to add a decimal and * for the +, - (for temperature), and E (exponent) symbols.

Tip! To change the conversion order, enter the value in the second Amount field. The result is shown in the first Amount field.

Set base currency and exchange rates

Before you can make currency conversions, you need to choose a base currency and add exchange rates. The rate of the base currency is always 1. The base currency determines the conversion rates of the other currencies.

- 1 Select Converter > Options > Currency rates. A list of currencies opens, and you can see the current base currency at the top.
 - **Tip!** To rename a currency, go to the currency rates view, scroll to the currency, and select Options > Rename currency.
- 2 To change the base currency, scroll to the currency, and select Options > Set as base curr.
- 3 Add exchange rates. Scroll to the currency, and enter a new rate, that is, how many units of the currency equal one unit of the base currency you have selected.

After you have inserted all the necessary exchange rates, you can make currency conversions.



Note: When you change base currency, you must enter the new rates because all previously set exchange rates are set to zero.



Notes

To write notes, press $\mathbf{f}_{\mathbf{P}}^{\alpha}$, and select Office > Notes. You can send notes to compatible devices, and save plain text files (.txt format) that you receive to Notes.

Internet

Various service providers maintain pages specifically designed for mobile devices. These pages use the wireless markup language (WML), extensible hypertext markup language (XHTML), or hypertext markup language (HTML).

Check the availability of services, pricing, and tariffs with your network operator or service provider. Service providers will also give you instructions on how to use their services.

Services

Press 🚱 , and select Services.

Shortcut: To start a connection, press and hold 0 in the standby mode.

Access point for Services

To access pages, you need service settings for the page that you want to use. You may receive the settings in a special text message from the network operator or service provider that offers the Web page. See 'Data and settings', p. 44. For more information, contact your network operator or service provider. ☆ Tip! Settings may be available on the Web site of a network operator or service provider.

Enter the settings manually

- Press *Q* and select Tools > Settings > Connection > Access points, and define the settings for an access point. Follow the instructions given to you by your service provider. See 'Connection', p. 103.
- 2 Press So , and select Services > Options > Bookmark manager > Add bookmark. Enter a name for the bookmark and the address of the page defined for the current access point.
- **3** To set the created access point as the default access point, select **Options** > **Settings** > **Access point**.

Bookmarks view

The bookmarks view opens when you open Services.

Glossary: A bookmark consists of an Internet address (mandatory), bookmark title, access point, and if the Web page requires, a user name and password.

Your device may have some bookmarks loaded for sites not affiliated with Nokia. Nokia does not warrant or endorse these sites. If you choose to access them, you should take the same precautions, for security or content, as you would with any Internet site.

Icons in the bookmark view:

The starting page defined for the default access point. If you use another default access point for browsing, the starting page is changed accordingly.

The automatic bookmarks folder contains bookmarks $(\cancel{2})$ that are collected automatically when you browse pages. The bookmarks in this folder are automatically organised according to domain.

 \checkmark Any bookmark showing the title or Internet address of the bookmark.

Add bookmarks manually

- 1 In the bookmarks view, select Options > Bookmark manager > Add bookmark.
- 2 Start to fill in the fields. Only the URL address must be defined. The default access point is assigned to the bookmark if no other one is selected. Press ***** to enter special characters such as /, ., :, and @. Press **C** to clear characters.
- 3 Select Options > Save to save the bookmark.

Send bookmarks

Scroll to a bookmark, and select Options > Send > Via text message. Press to send. It is possible to send more than one bookmark at the same time.

Make a connection

Once you have stored all the required connection settings, you can access the pages.

- Select a bookmark or enter the address in the field (S). When you enter the address, matching bookmarks are shown above the field. Scroll up to select a matching bookmark.
- 2 Press the joystick to start to download the page.

Connection security

If the security indicator **n** is displayed during a connection, the data transmission between the device and the Internet gateway or server is encrypted.

The security icon does not indicate that the data transmission between the gateway and the content server (or place where the requested resource is stored) is secure. The service provider secures the data transmission between the gateway and the content server.

Select **Options** > **Details** > **Security** to view details about the connection, encryptions status, and information about server and user authentication.

Security features may be required for some services, such as banking services. For such connections you need security certificates. For more information, contact your service provider. See also 'Certificate management', p. 109.

Browse

Important: Use only services that you trust and that offer adequate security and protection against harmful software.

To download a page, select a bookmark, or enter the address in the field ().

On a browser page, new links appear underlined in blue and previously visited links in purple. Images that act as links have a blue border around them.

To open a link, scroll to it, and press the joystick.

- ☆ Shortcut: Use # to jump to the end of a page and
 - * to the beginning of a page.

To go to the previous page while browsing, select **Back**. If **Back** is not available, select **Options** > **Navigation options** > **History** to view a chronological list of the pages you have visited during a browsing session. The history list is cleared each time a session is closed.

To retrieve the latest content from the server, select **Options > Navigation options > Reload**.

To save a bookmark, select **Options** > **Bookmarks** > **Save** as **bookmark**.

Tip! To access the bookmarks view while browsing, press and hold down the joystick. To return to the browser view again, select Options > Back to page. To save a page while browsing, select **Options** > **Advanced options** > **Save page**. You can save pages either to the device memory or on the hard drive, and browse them when offline. To access the pages later, scroll right in the bookmarks view to open the **Saved pages** view.

To enter a new URL address, select **Options** > **Navigation options** > **Go to web address**.

To open a list of commands or actions specific for the currently open page, select **Options** > **Service options**, if available.

You can download files that cannot be shown on the page, such as ringing tones, images, operator logos, themes, and video clips. To download an item, scroll to the link, and press the joystick.

When you start a download, a list of ongoing, paused, and completed downloads from the current browsing session is displayed. You can also view the list by selecting **Options** > **Tools** > **Downloads**. In the list, scroll to an item, and select **Options** to pause, resume, or cancel ongoing downloads, or open, save, or delete completed downloads.

Downloaded items are handled by their respective applications. For example, a downloaded image is saved in Gallery.

Important: Only install and use applications and other software from sources that offer adequate security and protection against harmful software.

Tip! The browser collects bookmarks automatically while you are browsing pages. The bookmarks are stored to the automatic bookmarks folder (~) and automatically organized according to domain. See also 'Settings for Services', p. 88.

View saved pages

If you regularly browse pages containing information that does not change very often, you can save and browse them when offline. In the saved pages view you can also create folders to store your saved pages.

To open the saved pages view, scroll right in the bookmarks view. In the saved pages view, press the joystick to open a saved page ().

To save a page while browsing, select **Options** > **Advanced options** > **Save page**.

To start a connection to the browser service and to download the latest version of the page, select **Options** > **Reload**. The device stays online after you reload the page.

Download and purchase items

You can download items such as ringing tones, images, operator logos, themes, and video clips. These items can be provided free, or you can purchase them. Downloaded items are handled by their respective applications, for example, a downloaded photo is saved in Gallery. Important: Only install and use applications and other software from sources that offer adequate security and protection against harmful software.

- 1 To download the item, scroll to the link, and press the joystick.
- **2** Select the appropriate option to purchase the item.
- **3** Carefully read all the information provided. To continue the download, select Accept. To cancel the download, select Cancel.

For information on downloading music, see 'Go to music shop', p. 20.

Copyright protections may prevent some images, music (including ringing tones), and other content from being copied, modified, transferred or forwarded.

End a connection

Select Options > Advanced options > Disconnect to end the connection and view the browser page offline, or to end the connection and close the browser, select Options > Exit.

Empty the cache

The information or services you have accessed are stored in the cache memory of the device.

A cache is a memory location that is used to store data temporarily. If you have tried to access or have accessed

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confidential information requiring passwords, empty the cache after each use. The information or services you have accessed are stored in the cache. To empty the cache,select **Options > Advanced options > Clear cache**.

Your device may have some bookmarks loaded for sites not affiliated with Nokia. Nokia does not warrant or endorse these sites. If you choose to access them, you should take the same precautions, for security or content, as you would with any Internet site.

Settings for Services

Select **Options** > **Settings** and the following settings:

Access point—To change the default access point, press the joystick to open a list of available access points. See 'Connection', p. 103. Some or all access points may be preset for your device by your service provider or network operator, and you may not be able to change, create, edit, or remove them.

Homepage-To define the home page.

Load imgs. Et sounds—Select whether you want to load images while browsing. If you select No, to load images later during browsing, select Options > Show images.

Font size—To choose the text size.

Default encoding—If text characters are not shown correctly, you may choose another encoding according to language.

Auto. bookmarks—To disable automatic bookmark collecting, select Off. If you want to continue collecting automatic bookmarks but hide the folder from the bookmarks view, select Hide folder.

Screen size—To select what is shown when you are browsing. Select Select. keys only or Full screen.

Search page—To define a Web page that is downloaded when you select Navigation options > Open search page in the bookmarks view, or when browsing.

Rendering—If you want the page layout shown as accurately as possible when in Small screen mode, select By quality. If you do not want external cascading style sheets to be downloaded, select By speed.

Cookies—To enable or disable the receiving and sending of cookies.

☆ Glossary: Cookies are a means of content providers to identify users and their preferences for frequently used content.

Java/ECMA script—To enable or disable the use of scripts. Security warnings—To hide or show security notifications. **Conf. DTMF sending**—Choose whether you want to confirm before the device sends DTMF tones during a voice call. See also 'Options during a voice call', p. 34.



Web

Press *§*^o, and select **Internet** > Web to open a supplementary web browser optimized for browsing web sites that are not originally formatted for mobile browsing.

Web preserves the original page layout.

To easily scroll within a page, scroll to any direction on a page. A smaller image of the page is displayed with a red frame that indicates the currently shown area.

To view the thumbnail image of the current page you can also select **Options** > **Tools** > **Page overview**. Move the red frame with the joystick and press the joystick to return to normal view.

To view recently visited pages as thumbnails, select **Options** > **Navigation options**.

To block pop-up windows, select **Options** > **Settings** > **Block pop-up windows**.

To search for a text in real time, select **Options** > **Find** and start entering the search string. The matching string is displayed as you enter the text.

Web feeds: You can subscribe to news and blog feeds hosted by many web sites. The Web feeds feature of the browser will also alert the user when feed links are available for a web site.

For information on other features and options in Web, see 'Services', p. 84.



Download! (network service) is a mobile content shop available on your device. You can browse, download, and install items, such as applications and media files, to your device from the Internet.

The items are categorized under catalogs and folders provided by different service providers. Some items may be chargeable, but you can usually preview them free of charge.

Press **\$** , and select **Internet** > **Download!**

For details, see the Additional applications leaflet available at www.nokia.com/support..

*

Connectivity

Bluetooth connectivity

You can connect wirelessly to other compatible devices with wireless Bluetooth technology. Compatible devices may include mobile phones, computers, and enhancements such as headsets and car kits. You can use Bluetooth connectivity to send images, video clips, music and sound clips, and notes; connect wirelessly to your compatible PC (for example, to transfer files).

Since devices with Bluetooth technology communicate using radio waves, your device and the other device do not need to be in direct line-of-sight. The two devices only need to be within 10 meters (33 feet) of each other, although the connection may be subject to interference from obstructions such as walls or from other electronic devices.

This device is compliant with Bluetooth Specification 1.2 supporting the following profiles: Generic Access Profile, Serial Port Profile, Dial-up Networking Profile, Headset Profile, Handsfree Profile, Generic Object Exchange Profile, Object Push Profile, File Transfer Profile, Basic Imaging Profile, Advanced Audio Distribution Profile, Audio/Video Remote Control Profile, and SIM Access profile. To ensure interoperability between other devices supporting Bluetooth technology, use Nokia approved enhancements for this model. Check with the manufacturers of other devices to determine their compatibility with this device.

Glossary: A profile corresponds to a service or a function, and defines how different devices connect. For example, the Handsfree Profile is used between the handsfree device and the phone. For devices to be compatible, they must support the same profiles.

There may be restrictions on using Bluetooth technology in some locations. Check with your local authorities or service provider.

Features using Bluetooth technology, or allowing such features to run in the background while using other features, increase the demand on battery power and reduce the battery life.

When the device is locked, you cannot use Bluetooth connectivity. See 'Security', p. 107 for more information on locking the device.

Settings

Press $\{g, and select Connect. > Bluetooth. When you open the application for the first time, you are asked to define a name for your device. After you set Bluetooth connectivity on and change My phone's visibility to Shown to all, your device and this name can be seen by other users with devices using Bluetooth technology.$

Select from the following:

Bluetooth–Select On or Off. To connect wirelessly to another compatible device, first set Bluetooth connectivity On, then establish a connection.

My phone's visibility—To allow your device to be found by other devices with Bluetooth technology, select Shown to all. To hide it from other devices, select Hidden.

My phone's name-Edit the name of your device.

Remote SIM mode—To enable another device, such as a car kit enhancement, to use the SIM card in your device to connect to the network, select **On**.

The remote SIM mode

To use the remote SIM mode, set Bluetooth connectivity on, and enable the use of the remote SIM mode with your device. Before the mode can be activated, the two devices must be paired and the pairing initiated from the other device. When pairing, use a 16-digit passcode, and set the other device as authorized. See 'Pair devices', p. 92. The remote SIM mode is activated from the other device.

When remote SIM mode is on in your Nokia N91, Remote SIM is displayed in the standby mode. The connection to the wireless network is turned off, as indicated by X in the signal strength indicator area, and you cannot use SIM card services or features requiring cellular network coverage. However, a wireless LAN connection remains active during the remote SIM mode.

Warning: In the remote SIM mode, you cannot make or receive any calls with your device, except make calls to certain emergency numbers, or use other features that require network coverage. To make calls, you must first leave the remote SIM mode. If the device has been locked, enter the lock code.

To leave the remote SIM mode, press the power key, and select Exit rem. SIM mode.

Security tips

When you are not using Bluetooth connectivity, select Bluetooth > Off or My phone's visibility > Hidden.

Operating the phone in hidden mode is a safer way to avoid malicious software.

Do not pair with an unknown device. Do not accept Bluetooth connectivity from sources you do not trust.

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Send data using Bluetooth connectivity

Several Bluetooth connections can be active at a time. For example, if you are connected to a headset, you can also transfer files to another compatible device at the same time.

Bluetooth connectivity indicators

- When **\$** is shown in the standby mode, Bluetooth connectivity is on.
- When (*) is blinking, your device is trying to connect with another device.
- When (*) is shown continuously, data is being transmitted using Bluetooth connectivity.
- ☆ Tip! To send text using Bluetooth connectivity, open Notes, write the text, and select Options > Send > Via Bluetooth.
- 1 Open an application or folder where the item you want to send is stored. For example, to send an image to another compatible device, open Gallery.
- 2 Select the item and Options > Send > Via Bluetooth. The device icon, the name of the device, the device type, or a short name for devices with Bluetooth technology within range start to appear on the display. Device icons: ■ computer, ■ phone, ¶¹ audio or video device, and ③ other device.

To interrupt the search, select Stop.

- 3 Select the device with which you want to connect.
- **4** If the other device requires pairing before data can be transmitted, a tone sounds, and you are asked to enter a passcode. See 'Pair devices', p. 92.
- 5 When the connection has been established, Sending data is shown.

The **Sent** folder in **Messag.** does not store messages sent using Bluetooth connectivity.

Tip! When searching for devices, some devices may show only the unique address (device address). To find the unique address of your device, enter the code *#2820# in the standby mode.

Pair devices

To open the paired devices view (\$%), in the **Bluetooth** application main view, scroll right.

Before pairing, create your own passcode (1-16 digits), and agree with the owner of the other device to use the same code. Devices that do not have a user interface have a factory-set passcode. The passcode is used only once.

To pair with a device, select **Options** > **New paired device**. Devices with wireless Bluetooth technology within range start to appear on the display. Select the device, and enter the passcode. The same passcode must be entered on the other device as well. After pairing, the device is saved to the paired devices view.

Paired devices are indicated by $*_{*}$ in the device search.

To set a device as authorized or unauthorized, scroll to a device, and select from the following options:

Set as authorised—Connections between your device and this device can be made without your knowledge. No separate acceptance or authorization is needed. Use this status for your own devices, such as your compatible headset or PC, or devices that belong to someone you trust. \mathbf{R} indicates authorized devices in the paired devices view.

Set as unauthorised—Connection requests from this device must be accepted separately every time.

To cancel a pairing, scroll to the device, and select Options > Delete. If you want to cancel all pairings, select **Options** > **Delete all.**

Section Tip! If you are currently connected to a device and delete the pairing with that device, pairing is removed immediately, and the connection is switched off.

Receive data using Bluetooth connectivity

When you receive data through Bluetooth connectivity, a tone sounds, and you are asked if you want to accept the message. If you accept, \frown is shown, and the item is placed in the Inbox folder in Messag. Messages received through Bluetooth connectivity are indicated by 'S. See 'Inbox-receive messages', p. 44.

Switch off Bluetooth connectivity

To switch off Bluetooth connectivity, select Bluetooth > Off.



Data cable

You can connect to a compatible PC with a USB data cable. With data cable connectivity, you can use Nokia PC Suite and transfer music or other data, such as image files, between your device and the PC. See 'Transfer music', p. 20 for more information on transferring music.

Press **S** and select **Connect**. > **Data cbl**. > **Data cable** mode. Select Media player to transfer music, PC Suite to use Nokia PC Suite, or Data transfer to transfer other data. To have the device ask the purpose of the connection each time the cable is connected, select Ask on connection.

PC connections

You can use your device with a variety of PC connectivity and data communications applications. With Nokia PC Suite you can, for example, backup and restore your settings and DRM rights objects, synchronise contacts, calendar and To-do notes, and transfer images between your device and a compatible PC. Because of the high capacity of the 8 GB hard drive you can store hundreds of images and songs in the device.

Always create the connection from the PC to synchronise with your device.

For further information on how to install Nokia PC Suite (compatible with Windows 2000 and Windows XP), see the User Guide for Nokia PC Suite and the Nokia PC Suite help in the 'Install' section on the CD-ROM supplied in the sales package.

CD-ROM

The CD-ROM should launch after you have inserted it into the CD-ROM drive of a compatible PC. If not, proceed as follows: Open Windows Explorer, right-click the CD-ROM drive where you inserted the CD-ROM, and select Autoplay.

Your device as a modem

You can use your device as a modem to send and receive e-mail, or to connect to the Internet with a compatible PC by using a Bluetooth connection or a data cable. Detailed installation instructions can be found in the User Guide for Nokia PC Suite in Modem options on the CD-ROM.

⇒ Tip! When using Nokia PC Suite for the first time, to connect your device to a compatible PC and to use Nokia PC Suite, use the Get Connected wizard available in Nokia PC Suite. See the CD-ROM supplied in the sales package.



Connection manager

You may have multiple data connections active at the same time when you are using your device in GSM and UMTS networks. Press *S*^o, and select Connect. > Conn. mgr. To view the status of data connections or end connections in GSM and UMTS network and wireless LAN, select Act. data conn.. To search for wireless LANs available within range, select Availab. WLAN.

Data connections

In the active connections view, you can see the open data connections: data calls (D), packet data connections ($\stackrel{36}{=}$ or \underline{X}), and wireless LAN connections (\blacksquare).

Note: The actual time invoiced for calls by your service provider may vary, depending on network features, rounding off for billing, and so forth.

To end a connection, select Options > Disconnect. To close all open connections, select Options > Disconnect all.

To view the details of a connection, select **Options** > **Details**. The details shown depend on the connection type.

View data connection details

To view the details of a connection, scroll to a connection, and select **Options** > **Details**.

Name—The name of the Internet access point (IAP) in use, or the modem connection name if the connection is a dial-up connection.

Bearer—The type of data connection: Data call, High speed (GSM), or Packet data.

Status—The current status of the connection: Connecting, Conn. (inactive), Conn.(active), On hold, Disconnecting, or Disconnected. **Recvd.**—The amount of data, in bytes, received to your device.

Sent-The amount of data, in bytes, sent from your device.

Duration—The length of time that the connection has been open.

Speed—The current speed of both sending and receiving data in kilobytes per second.

Dial-up-The dial-up number used.

Shared (not shown if the connection is not shared)—The number of applications using the same connection.

Wireless LAN

Your device is approved for use in a wireless local area network (wireless LAN). With wireless LAN, you can connect your device to the Internet.

Some places, like France, have restrictions on the use of wireless LAN. Check with your local authorities for more information.

Features using wireless LAN, or allowing such features to run in the background while using other features, increase the demand on battery power and reduce the battery life.

Your device supports the following wireless LAN features:

• IEEE 802.11g standard

- Operation at a frequency of 2.4 GHz
- Encryption methods wired equivalent privacy (WEP) with keys up to 128 bits, Wi-Fi protected access (WPA), and 802.1x. These functions can be used only if they are supported by the network.

You can create an Internet access point (IAP) in a wireless LAN and use it for applications that need to connect to the Internet.

Create an Internet access point

- 1 Press S , and select Connect. > Conn. mgr. > Availab. WLAN.
- 2 The device searches for wireless LANs within range. To create an Internet access point in a network, select Options > Define access point.
- **3** The device creates an Internet access point with default settings. To view or change the settings of the Internet access point, see 'Access points', p. 104.

When an application asks you to select an access point, select the created access point, or **Search for WLAN**, to search for wireless LANs in range.

A wireless LAN connection is established when you create a data connection using a wireless LAN Internet access point. The active wireless LAN connection ends when you end the data connection. To end the connection, see 'Connection manager', p. 94. You can use wireless LAN during a voice call or when packet data is active. You can only be connected to one wireless LAN access point device at a time, but several applications can use the same wireless LAN connection.

When you activate the **Offline** profile, you can still use wireless LAN (if available). Remember to comply with any applicable safety requirements when establishing and using a wireless LAN connection.

There are two operating modes in wireless LAN: Infrastructure and Ad-hoc.

The infrastructure operating mode allows two kinds of communication: wireless devices are connected to each other through a wireless LAN access point device, or wireless devices are connected to a wired LAN through a wireless LAN access point device.

In the ad hoc operating mode, devices can send and receive data directly with each other. To create an Internet access point for the ad hoc network, see 'Access points', p. 104.

☆ Tip! To check the unique Media Access Control (MAC) address that identifies your device, enter *#62209526# in the standby mode.



Press *§*^o, and select **Connect**. > **Sync**. **Sync** enables you to synchronise your notes, calendar, and contacts with various calendar and address book applications on a compatible PC or on the Internet.

The synchronisation application uses SyncML technology for synchronisation. For information on SyncML compatibility, contact the supplier of the calendar or address book application you want to synchronise your phone data with.

You may receive syncronisation settings in a special text message. See 'Data and settings', p. 44.

Create a new synchronisation profile

1 If no profiles have been defined, your device asks if you want to create a new profile. Select Yes.

To create a new profile in addition to existing ones, select **Options** > **New sync profile**. Choose whether you want to use the default setting values or copy the values from an existing profile to be used as the basis for the new profile.

2 Define the following:

Sync profile name—Write a descriptive name for the profile.

Applications–Select the applications to synchronize with this profile, Contacts and Calendar, for example.

Scroll to each application and press the joystick to define its synchronization settings:

- Include in sync-Select Yes if you want to synchronise the application.
- In Remote database, enter a correct path to the remote calendar, address book, or database on the server.
- Select Synchronisation type: Normal (two-way synchronisation), To server only, or To phone only. Connection settings—Define the following. Contact your service provider or system administrator for the correct values.
- Server version—Select the SyncML version the synchronization server uses. You must select 1.2 to synchronize e-mail.
- Server ID-Enter the server ID for the e-mail server (shown only if Server version is set to 1.2).
- Data bearer-Select the connection type: Internet, or Bluetooth.
- Access point (shown only if Data bearer is set to Internet)—Select an access point to use for the data connection.
- Host address—The IP address of the host server.
- Port-The server port number (shown only if Data bearer is set to Internet).
- User name—Your user ID for the synchronisation server.

- Password–Your password for the synchronization server.
- Allow sync requests—Select Yes if you want to allow the server to start a synchronization.
- Accept all sync reqs.—Select No if you want your device to ask you before a synchronization initialised by the server is started.
- Network authentic. (shown only if Data bearer is set to Internet)—Select Yes to enter a network user name and password. Scroll down to view the user name and password fields.
- **3** Select Back to save the settings and return to the main view.

Synchronise data

In the **Sync** main view, you can see the different synchronization profiles and the kind of data to be synchronized.

- Select a synchronization profile and Options > Synchronise. The status of the synchronization is shown at the bottom of the screen. To cancel synchronization before it finishes, select Cancel.
- 2 You are notified when the synchronization is complete. After synchronization is complete, select Options > View log to open a log file showing the synchronization status (Complete or Incomplete) and

how many calendar or contact entries, or notes have been added, updated, deleted, or discarded (not synchronized) in your device or on the server.

Device manager

Press $\{j\}$, and select **Connect**. > **Device mgr.** You may receive server profiles and different configuration settings from your network operator, service provider, or company information management department. These configuration settings may include access point settings for data connections and other settings used by different applications in your device.

To connect to a server and receive configuration settings for your device, select **Options > Start configuration**.

Server profile settings

Contact your service provider for the correct settings.

Server name-Enter a name for the configuration server.

Server ID—Enter the unique ID to identify the configuration server.

Server password—Enter a password to identify your device to the server.

Access point—Select an access point to be used when connecting to the server.

Host address-Enter the URL address of the server.

Port-Enter the port number of the server.

User name and Password—Enter your user name and password.

Allow configuration—To receive configuration settings from the server, select Yes.

Auto-accept all requests—If you want your device to ask for confirmation before accepting a configuration from the server, select No.

Network authentication—Select whether network authentication is used.

Tools

Settings wizard

Settings wizard configures your device for operator (MMS, GPRS, mobile Internet, and streaming), e-mail, and push to talk (network service) settings based on your network operator information.

To use these services, you may have to contact your network operator or service provider to activate a data connection or other services.

Press **\$** , and select **Tools** > **Sett. wizard**.

Select the item from the menu that you want to configure your device for, and press the joystick.

E-mail

- When you choose to configure your e-mail settings, Settings wizard detects your available network operator, and asks you to confirm it. Select OK, or scroll to another network operator, and select OK.
- 2 Select your e-mail service provider from the list.
- **3** Select the outgoing mail server. Use the default server if you are not sure.

- 4 Settings wizard prompts you to enter the details of your e-mail address, user name, and password. Select each in turn, and select Options > Change. Enter the details, and select OK.
- 5 Select Options > OK when you are finished.
- 6 Select OK to confirm that you want to set up the mailbox for the specified operator.
- 7 Select OK.

Push to talk

This option is available only if you have the application installed in your device, and you have subscribed to the service.

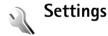
- 1 When you choose to configure your push-to-talk (network service) settings, Settings wizard detects your available network operator, and asks you to confirm it. Select OK, or scroll to another network operator, and select OK.
- 2 Some operators require a user name, password, and nickname. Select each in turn, and select Options > Change. Enter the details, and select OK.
- **3** Select **Options** > **OK** when you are finished.
- 4 Select OK to confirm that you want to set up Push to talk for the specified operator.

Operator

- 1 When you choose to configure your operator settings, Settings wizard detects your available network operator and asks you to confirm it. Select OK, or scroll to another network operator, and select OK.
- 2 Select OK to confirm that you want to set up your device for the specified operator.

More information

If you experience any problems with Settings wizard, visit the Nokia phone settings Web site at www.nokia.com/phonesettings.



To change settings, press $\{g\}$, and select Tools > Settings. Scroll to a setting group, and press the joystick to open it. Scroll to a setting you want to change, and press the joystick.

Phone

General

Phone language—Changing the language of the display texts in your device also affects the format used for date

and time and the separators used, for example, in calculations. Automatic selects the language according to the information on your SIM card. After you change the display text language, the device restarts.

Changing the settings for Phone language or Writing language affects every application in your device, and the change remains effective until you change these settings again.

Writing language—Changing the language affects the characters and special characters available when writing text and the predictive text dictionary used.

Predictive text—You can set the predictive text input On or Off for all editors in the device. The predictive text dictionary is not available for all languages.

Welcome note / logo—The welcome note or logo is displayed briefly each time you switch on the device. Select Default to use the default image, Text to write a welcome note (up to 50 letters), or Image to select a photo or picture from Gallery.

Orig. phone settings—You can reset some of the settings to their original values. To do this, you need the lock code. See 'Security', 'Phone and SIM', p. 108. After resetting, the device may take a longer time to power on. Documents and files are not affected.

Standby mode

Active standby—Use shortcuts to applications in the standby mode on the display. See 'Active standby mode', p. 29.

Left selection key—To assign a shortcut to the left selection key (<u>)</u> in the standby mode, select an application from the list.

Right selection key—To assign a shortcut to the right selection key (—) in the standby mode, select an application from the list.

Active standby apps.—To select the application shortcuts you want to appear in the active standby mode, select the applications from the list. This setting is only available if Active standby is on.

You can also assign shortcuts to different movements of the joystick. Select the application for each movement from a list. The joystick shortcuts are only available if Active standby is off.

Operator logo—This setting is visible only if you have received and saved an operator logo. You can choose whether you want the operator logo to show or not.

Display

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Brightness—You can change the brightness of the display to be lighter or darker.

Power saver time-out—The power saver is activated when the time-out period is over.

Light time-out-Select a time-out after which the backlight of the display is switched off.

Call settings

Send my caller ID (network service)—You can set your phone number to be displayed to (Yes) or hidden from (No) the person to whom you are calling, or the value may be set by your network operator or service provider when you make a subscription (Set by network).

Call waiting (network service)—If you have activated call waiting, the network notifies you of a new incoming call while you have a call in progress. Select Activate to request the network to activate call waiting, Cancel to request the network to deactivate call waiting, or Check status to check if the function is active or not.

Reject call with SMS—Select **Yes** to send a text message to a caller informing why you could not answer the call. See 'Answer or reject a call', p. 33.

Message text—Write a text to be sent in a text message when you reject a call.

Automatic redial-Select On, and your device makes a maximum of ten attempts to connect the call after an

unsuccessful call attempt. To stop automatic redialling, press

Summary after call—Activate this setting if you want the device to briefly display the approximate duration of the last call.

Speed dialling—Select **On**, and the numbers assigned to the speed dialing keys (**2** – **9**) can be dialed by pressing and holding the key. See also 'Speed dial a phone number', p. 32.

Anykey answer–Select On, and you can answer an incoming call by briefly pressing any key under the slide cover.

Line in use (network service)—This setting is shown only if the SIM card supports two subscriber numbers, that is, two phone lines. Select which phone line you want to use for making calls and sending text messages. Calls on both lines can be answered irrespective of the selected line. If you select Line 2 and have not subscribed to this network service, you will not be able to make calls. When line 2 is selected, $\mathbf{2}$ is shown in the standby mode.

☆ Tip! To switch between the phone lines, press and hold # in the standby mode.

Line change (network service)—To prevent line selection, select Line change > Disable if supported by your SIM card. To change this setting, you need the PIN2 code.

Connection

Data connections and access points

Your device supports packet data connections ($\frac{K}{2}$), such as GPRS in the GSM network.

⇒ Glossary: General packet radio service (GPRS) uses packet data technology where information is sent in short packets of data over the mobile network.

To establish a data connection, an access point is required. You can define different kinds of access points, such as:

- MMS access point to send and receive multimedia messages
- Access point for the Web application to view WML or XHTML pages
- Internet access point (IAP) to send and receive e-mail

Check the type of access point you need with your service provider for the service you wish to access. For availability and subscription to packet data connection services, contact your network operator or service provider.

Packet data connections in GSM and UMTS networks

When you use your device in GSM and UMTS networks, multiple data connections can be active at the same time and access points can share a data connection. In the UMTS network, data connections remain active during voice calls. To check the active data connections, see 'Connection manager', p. 94.

The following indicators may be displayed below the signal indicator, depending on which network you use:

acket data is available in the network.

 \clubsuit GSM network, packet data connection is active, data is being transferred.

 $\underline{\underline{\P}}$ GSM network, multiple packet data connections are active.

 \clubsuit GSM network, packet data connection is on hold. (This can happen during a voice call, for example.)

35 UMTS network, packet data is available in the network.

UMTS network, packet data connection is active, data is being transferred.

 $\frac{32}{2}$ UMTS network, multiple packet data connections are active.

 $\stackrel{3G}{\neq}$ UMTS network, packet data connection is on hold.

Access points

Some or all access points may be preset for your device by your service provider or network operator, and you may not be able to change, create, edit, or remove them.

access point settings in a text message from a service provider. See 'Data and settings', p. 44.

Tip! See also 'Receive MMS and e-mail settings', p. 43, 'E-mail', p. 51, and 'Access point for Services', p. 84.

➡ indicates a packet data access point, and ■ a wireless LAN access point.

To create a new access point, press *G* , and select Tools > Settings > Connection > Access points > Options > New access point.

Follow the instructions given to you by your service provider.

Connection name—Give a descriptive name for the connection.

Data bearer—Depending on what data connection you select, only certain setting fields are available. Fill in all fields marked with Must be defined or with a red asterisk. Other fields can be left empty, unless you have been instructed otherwise by your service provider.

To be able to use a data connection, the network service provider must support this feature, and if necessary, activate it for your SIM card.

Packet data

Follow the instructions from your service provider.

Access point name (for packet data only)—The access point name is needed to establish a connection to the packet data and UMTS networks. You obtain the access point name from your network operator or service provider.

User name—The user name may be needed to make a data connection, and it is usually provided by the service provider. The user name is often case-sensitive.

Prompt password—Select **Yes** if you must enter a new password every time you log in to a server, or if you do not want to save your password in your device.

Password—A password may be needed to make a data connection, and it is usually provided by the service provider. The password is often case-sensitive.

Authentication-Select Normal or Secure.

Homepage—Depending on what you are setting up, write the Web address or the address of the multimedia messaging centre. Complete the Advanced settings to further define your access details:

Network type—Select the Internet protocol type to use: IPv4or IPv6. The other settings depend on the selected network type.

Phone IP address (for IPv4)—Enter the IP address of your device.

DNS address— Primary DNS address, Second. name server: Contact your Internet service provider to obtain these addresses.

Glossary: The domain name service (DNS) is an Internet service that translates domain names such as www.nokia.com into IP addresses like 192.100.124.195.

Proxy serv. address—Define the address for the proxy server.

Proxy port number—Enter the proxy port number.

SIP settings

SIP (Session Initiation Protocol) settings are needed for certain network services using SIP, such as video sharing. You may receive the settings in a special text message from your network operator or service provider. You can view, delete, or create these setting profiles in SIP settings.

Data call

The data call settings affect all access points that use a GSM data call.

Online time—Set data calls to disconnect automatically after a time-out if there is no activity. To enter a time-out, select **User defined**, and enter the time in minutes. If you select **Unlimited**, data calls are not disconnected automatically.

Wireless LAN

Follow the instructions from your service provider.

WLAN netw. name—Select Enter manually or Search for netw.. If you select an existing network, WLAN netw. mode and WLAN security mode are determined by the settings of its access point device.

WLAN netw. mode—Select Ad-hoc to create an ad-hoc network and to allow devices to send and receive data directly; a wireless LAN access point device is not needed.

WLAN security mode—Select the encryption used: WEP, 802.1x (not for ad hoc networks), or WPA/WPA2. If you select Open network, no encryption is used. The WEP, 802.1x, and WPA functions can be used only if the network supports them.

WLAN security sett.—Enter the settings for the selected security mode:

Security settings for WEP:

Wep key in use-Select the WEP key number. You can create up to four WEP keys. The same settings must be entered on the wireless LAN access point device.

Authentication type—Select Open or Shared for the authentication type between your device and the wireless LAN access point device.

WEP key settings—Enter WEP encryption (length of the key), WEP key format (ASCII or Hexadecimal), and WEP key (the WEP key data in the selected format).

Security settings for 802.1x and WPA/WPA2:

WPA mode—Select the means of authentication: EAP to use an extensible authentication protocol (EAP) plug-in, or Pre-shared key to use a password. Complete the appropriate settings:

EAP plug-in settings (only for EAP)—Enter the settings as your service provider instructs.

Pre-shared key (only for Pre-shared key)—Enter a password. The same password must be entered on the wireless LAN access point device.

TKIP encryption—Select whether Temporal Key Integrity Protocol (TKIP) is used.

Homepage–Define a home page.

Select **Options** > **Advanced settings** and from the following:

IPv4 settings: Phone IP address (the IP address of your device), Subnet mask (the subnet IP address), Default gateway (the gateway), and DNS address—enter the IP addresses of the primary and secondary DNS server. Contact your Internet service provider for these addresses.

IPv6 settings > DNS address—Select Automatic, Wellknown, or User defined.

Ad-hoc channel (only for Ad-hoc)—To enter a channel number (1-11) manually, select User defined.

Proxy serv. address—Enter the address for the proxy server.

Proxy port number—Enter the proxy port number.

Packet data

The packet data settings affect all access points using a packet data connection.

Packet data conn.—If you select When available and you are in a network that supports packet data, the device registers to the packet data network. Also, starting an active packet data connection is quicker (for example, to send and receive e-mail). If you select When needed, the device uses a packet data connection only if you start an application or action that needs it. If there is no packet data coverage and you select When available, the device periodically tries to establish a packet data connection.

Access point—The access point name is needed to use your device as a packet data modem to your PC.

Configurations

You may receive trusted server settings from your network operator or service provider in a configuration message, or

the settings may be stored on your SIM or USIM card. You can save these settings to your device, view, or delete them in **Configurations**.

Date & time

See 'Clock settings', p. 15. See also the language settings in 'General'. p. 101.

Security

Phone and SIM

PIN code request—When active, the code is requested each time the device is switched on. Deactivating the personal identification number (PIN) code request may not be allowed by some SIM cards. See 'Glossary of PIN and lock codes', p. 108.

PIN code, PIN2 code, and Lock code—You can change the lock code, PIN code, and PIN2 code. These codes can only include the numbers from **0** to **9**. See 'Glossary of PIN and lock codes', p. 108.

Avoid using access codes similar to the emergency numbers to prevent accidental dialling of the emergency number.

If you forget any of these codes, contact your service provider.

Autolock period—You can set an autolock period, a timeout after which the device automatically locks and can be used only if the correct lock code is entered. Enter a number for the timeout in minutes, or select **None** to turn off the autolock period.

To unlock the device, enter the lock code.

When the device is locked, calls still may be possible to the official emergency number programmed into your device.

⇒b Tip! To lock the device manually, press (). A list of commands opens. Select Lock phone. For information on Lock switch see 'Keypad lock (keyguard)', p. 17.

Lock if SIM changed—You can set the device to ask for the lock code when an unknown SIM card is inserted into your device. The device maintains a list of SIM cards that are recognised as the owner's cards.

Closed user group (network service)—You can specify a group of people to whom you can call and who can call you.

When calls are limited to closed user groups, calls still may be possible to the official emergency number programmed into your device.

Confirm SIM services (network service)—You can set the device to display confirmation messages when you are using a SIM card service.

Glossary of PIN and lock codes

If you forget any of these codes, contact your service provider.

Personal identification number (PIN) code—This code protects your SIM card against unauthorised use. The PIN code (4 to 8 digits) is usually supplied with the SIM card. After three consecutive incorrect PIN code entries, the PIN code is blocked, and you need to unblock it before you can use the SIM card again. See the information about the PUK code in this section.

UPIN code—This code may be supplied with the USIM card. The USIM card is an enhanced version of the SIM card and is supported by UMTS mobile phones. The UPIN code protects the USIM card against unauthorised use.

PIN2 code—This code (4 to 8 digits) is supplied with some SIM cards, and is required to access some functions in your device.

Lock code (also known as security code)—This code (5 digits) can be used to lock the device to avoid unauthorised use. The factory setting for the lock code is **12345**. To avoid unauthorised use of your device, change the lock code. Keep the new code secret and in a safe place separate from your device.

Personal unblocking key (PUK) code and PUK2 code—These codes (8 digits) are required to change a blocked PIN code or PIN2 code, respectively. If the codes are not supplied

with the SIM card, contact the operator whose SIM card is in your device.

UPUK code—This code (8 digits) is required to change a blocked UPIN code. If the code is not supplied with the USIM card, contact the operator whose USIM card is in your device.

Certificate management

Digital certificates do not guarantee safety; they are used to verify the origin of software.

Glossary: Digital certificates are used to verify the origin of the XHTML or WML pages and installed software. However, they can only be trusted if the origin of the certificate is known to be authentic.

In the certificate management main view, you can see a list of authority certificates that are stored in your device. Scroll right to see a list of personal certificates, if available.

Digital certificates should be used if you want to connect to an online bank or another site or remote server for actions that involve transferring confidential information. They should also be used if you want to reduce the risk of viruses or other malicious software and be sure of the authenticity of software when downloading and installing software.

Important: Even if the use of certificates makes the risks involved in remote connections and software

installation considerably smaller, they must be used correctly in order to benefit from increased security. The existence of a certificate does not offer any protection by itself; the certificate manager must contain correct, authentic, or trusted certificates for increased security to be available. Certificates have a restricted lifetime. If **Expired certificate** or **Certificate not valid yet** is shown even if the certificate should be valid, check that the current date and time in your device are correct.

View certificate details-check authenticity

You can only be sure of the correct identity of a server when the signature and the period of validity of a server certificate have been checked.

You are notified on the device display if the identity of the server is not authentic or if you do not have the correct security certificate in your device.

To check certificate details, scroll to a certificate, and select **Options** > **Certificate details**. When you open certificate details, the validity of the certificate is checked, and one of the following notes may be displayed:

- Certificate not trusted—You have not set any application to use the certificate. See 'Change the trust settings', p. 110.
- Expired certificate—The period of validity has ended for the selected certificate.

- Certificate not valid yet—The period of validity has not yet begun for the selected certificate.
- Certificate corrupted—The certificate cannot be used. Contact the certificate issuer.

Change the trust settings

Before changing any certificate settings, you must make sure that you really trust the owner of the certificate and that the certificate really belongs to the listed owner.

Scroll to an authority certificate, and select **Options** > **Trust settings**. Depending on the certificate, a list of the applications that can use the selected certificate is shown. For example:

- Symbian installation: Yes—The certificate is able to certify the origin of a new Symbian operating system application.
- Internet: Yes—The certificate is able to certify servers.
- App. installation: Yes—The certificate is able to certify the origin of a new Java application.

Select **Options** > **Edit trust setting** to change the value.

Track protect. object

Some copyright-protected music files may include a transaction identifier. Select whether you allow the identifier to be sent with the music file if you send or forward the file. The provider of the music file can use the identifier to track the distribution of the files.

EAP plug-ins

You can view the EAP plug-ins currently installed in your device (network service). Some Internet access points that use wireless LAN as a data bearer and WPA security mode use the plug-ins for authentication.

Security module

To view or edit a security module (if available) in Secur. mod., scroll to it, and press the joystick. To view detailed information about a security module, scroll to it, and select Options > Security details.

Call diverting

Call divert allows you to divert your incoming calls to your voice mailbox or another phone number. For details, contact your service provider.

- 1 Press *G* , and select Tools > Settings > Call divert.
- 2 Select which calls you want to divert: Voice calls, Data calls, or Fax calls.
- **3** Select the desired divert option. To divert voice calls when your number is busy or when you reject incoming calls, select **If busy**.
- 4 Set the divert option on (Activate) or off (Cancel), or check whether the option is activated (Check status). Several divert options can be active at the same time.

When all calls are diverted, _____ is shown in the standby mode.

Call barring

Call barring (network service) allows you to restrict the calls that you make or receive with the device. To change the settings, you need the barring password from your service provider. Select the desired barring option, and set it on (Activate) or off (Cancel), or check whether the option is active (Check status). Call barring affects all calls, including data calls.

When calls are barred, calls still may be possible to certain official emergency numbers.

Network

Your device can automatically switch between the GSM and UMTS networks. The GSM network is indicated with Ψ in the standby mode. The UMTS network is indicated with 3G.

Network mode (shown only if supported by the operator)—Select which network to use. If you select Dual mode, the device uses the GSM or UMTS network automatically, according to the network parameters and the roaming agreements between the network operators. Contact your network operator for more details.

Operator selection—Select **Automatic** to set the device to search for and select one of the available networks, or **Manual** to manually select the network from a list of networks. If the connection to the manually selected network is lost, the device sounds an error tone and asks you to reselect a network. The selected network must have a roaming agreement with your home network, that is, the operator whose SIM card is in your device.

Glossary: A roaming agreement is an agreement between two or more network service providers to enable the users of one service provider to use the services of other service providers.

Cell info display—Select **On** to set the device to indicate when it is used in a cellular network based on microcellular network (MCN) technology and to activate cell info reception.

Enhanc. sett.

Indicator shown in the standby mode: \mathbf{Q} –A headset is connected.

Select Headset or Bluetooth handsfree and the following options are available:

Default profile—To set the profile that you want activated each time you connect a certain enhancement to your device. See 'Profiles—Set tones', p. 28. Automatic answer—To set the device to answer an incoming call automatically after 5 seconds. If the Ringing type is set to Beep once or Silent, automatic answer is disabled.



Positioning

Press *(y*), and select **Tools** > **Position.** With **Positioning**, you can enable one or more positioning methods to allow compatible applications to receive the position information of the current location of your device. When you enable a positioning method you can, for example, save the position information of your current location in Landmarks and Navigator.

Positioning methods may be network based (network service) or they may require that you use a compatible GPS receiver. To enable a positioning method, scroll the method, and select **Options** > **Enable**.

To start using a compatible GPS receiver with Bluetooth connectivity for positioning, scroll to **Bluetooth GPS**, and select **Options** > **Enable**. If asked, select your GPS receiver from the found devices with Bluetooth connectivity, and pair the devices. See "Pair devices", p. 92.

The Global Positioning System

The Global Positioning System (GPS) is operated by the

United States government, which is solely responsible for accuracy and maintenance of the system. The accuracy of location data can be affected by adjustments to GPS satellites made by the United States government and is subject to change with the United States Department of Defense civil GPS policy and the Federal Radionavigation Plan. Accuracy can also be affected by poor satellite geometry. Availability and quality of GPS signals may be affected by your location, buildings and natural obstacles as well as weather conditions. The GPS receiver should only be used outdoors to allow reception of GPS signals. GPS should only be used as a navigation aid. It should not be used for precise location measurement and you should never rely solely on location data from the GPS receiver for positioning or navigation.

You may receive a request from a network service to receive your position information. Service providers may offer information about local topics, such as weather or traffic conditions, based upon the location of your device.

When you receive a position request, a message is displayed showing the service that is making the request. Select Accept to allow your position information to be sent, or select Reject to deny the request.



Landmarks

Press *§* , and select Tools > Landmarks. With Landmarks, you can save the position information of specific locations in your device. You can sort the saved locations into different categories, such as business, and add other information, such as addresses, to them. You can use your saved landmarks in compatible navigation applications, such as Navigator in your Nokia N91.

To create a new landmark, select **Options** > **New landmark**. If your device is connected to a compatible GPS receiver, you can make a positioning request for the coordinates of your current location. Select **Current position** to retrieve the position information. To enter the position information manually, select **Enter manually**.

To edit or add information to a saved landmark, for example, a street address, scroll to a landmark, and press the joystick. Scroll to the desired field and enter the information.

You can sort your landmarks into the preset categories, and create new categories. To edit and create new landmark categories, scroll right in Landmarks, and select Options > Edit categories.

To add a landmark to a category, scroll to the landmark, and select **Options** > **Add to category**. Scroll to each category to which you want to add the landmark, and press the joystick to select it. To send one or several landmark to a compatible device, select **Options** > **Send**. Your received landmarks are placed in the **Inbox** folder in **Messaging**.

Voice commands

You can use voice commands to control your device. For more information about the enhanced voice commands supported by your device, see 'Voice dialling', p. 32.

To activate enhanced voice commands for starting applications or profiles, you must open the Voice comms. application and its Profiles folder. Press *f*^o, and select Tools > Voice cm. > Profiles. The device creates voice commands for the applications and profiles. You can now use enhanced voice commands by pressing and holding the right selection key (_____) and saying a voice command in the standby mode. The voice command is the name of the application or profile displayed in the list.

To add more applications to the list, select **Options** > **New application**. To add a second voice command that can be used to start the application, scroll to it, select **Options** > **Change command**, and enter the new voice command as text. Avoid very short names, abbreviations, and acronyms.

To change voice command settings, select **Options** > **Settings**. To switch off the synthesiser that plays

recognised voice tags and commands in the selected device language, select **Synthesiser** > **Off**. To reset voice recognition learning, for example, when the main user of the device has changed, select **Reset voice adapts.**



Application manager

Press *G* , and select Tools > App. mgr.. You can install two types of applications and software to your device:

- J2ME[™] applications based on Java[™] technology with the extension .jad or .jar ([™]).
- Other applications and software suitable for the Symbian operating system (). The installation files have the .sis extension. Only install software specifically designed for your Nokia N91. Software providers will often refer to the official model number of this product: the Nokia N91-2.

Installation files may be transferred to your device from a compatible PC, downloaded during browsing, or sent to you in a multimedia message, as an e-mail attachment, or using Bluetooth connectivity. You can use Nokia Application Installer in Nokia PC Suite to install an application to your device. If you use Microsoft Windows Explorer to transfer a file, save the file to the hard drive of your device (local disk).

Example: If you have received the installation file as an e-mail attachment, go to your mailbox, open the e-mail, open the attachments view, scroll to the installation file, and press the joystick to start installation.

Install applications and software

Tip! You can also use Nokia Application Installer available in Nokia PC Suite to install applications. See the CD-ROM supplied with the device.

Application icons are as follows:

- 🍇 –.sis application
- 🔩–Java application
- —application is not fully installed.
- **Important:** Only install and use applications and other software from sources that offer adequate security and protection against harmful software.

Before installation, note the following:

- To view the application type, version number, security certificate details, and the supplier or manufacturer of the application, select Options > View details.
- If you install a file that contains an update or repair to an existing application, you can only restore the original application if you have the original installation file or a full back-up copy of the removed software

package. To restore the original application, remove the application, and install the application again from the original installation file or the back-up copy.

• The .jar file is required for installing Java applications. If it is missing, the device may ask you to download it. If there is no access point defined for the application, you are asked to select one. When you are downloading the .jar file, you may need to enter a user name and password to access the server. You obtain these from the supplier or manufacturer of the application.

To install applications and software complete these steps:

- Open App. mgr., and scroll to an installation file. Alternatively, search the device memory or the hard drive in File mgr., or open a message in Messag. > Inbox that contains an installation file.
- **2** Select the application, and press the joystick to start the installation.
 - Tip! While browsing, you can download an installation file, and install it without closing the connection.

During installation, the device shows information about the progress of the installation. If you are installing an application without a digital signature or certification, the device displays a warning. Continue installation only if you are sure of the origin and contents of the application. To start an installed application, locate it in the menu, and press the joystick.

To start a network connection and to view extra information about the application, scroll to it, and select **Options** > **Go to web address**, if available.

To see what software packages were installed or removed and when, select **Options** > **View log**.

To send your installation log to a help desk so that they can see what was installed or removed, select **Options** > **Send log** > **Via text message** or **Via e-mail** (available only if the correct e-mail settings are in place).

Remove applications and software

Scroll to a software package, and select Options > Remove. Select Yes to confirm.

If you remove software, you can only reinstall it if you have the original software package or a full backup of the removed software package. If you remove a software package, you may no longer be able to open documents created with that software.

If another software package depends on the software package that you removed, the other software package may stop working. Refer to the documentation of the installed software package for details.

Application settings

Select **Options** > **Settings** and from the following:

Online certif. check—Select to check the online certificates before installing an application.

Default web address—Set the default address used when checking online certificates.

Some Java applications may require a phone call, a message to be sent, or a network connection to a specific access point for downloading extra data or components. In the App. mgr. main view, scroll to an application, and select Options > Suite settings to change settings related to that specific application.



Memory-Hard drive

To monitor the amount of used and free disk space on the device hard drive, press $\{g\}$, and select Tools > Hard drive. To see how much disc space the different applications and data types use, select Options > Memory details.

To change the name of the hard drive, select **Options** > **Hard drive name**.

Tools

Scanning, defragmenting or formatting the hard drive increases the demand on battery power. Switch the phone to Offline mode, do not use your device for anything else and use a charger while scanning, defragmenting or formatting the hard drive.

Scan hard drive

You can scan your hard drive to find and fix possible errors.

To scan your hard drive, select **Options** > **Tools** > **Scan** hard drive. A progress bar is displayed.

After the scanning is completed you will be informed of the results.

Defragment hard drive

For better results, scan the hard drive before you defragment it.

To optimize your hard drive, select **Options** > **Tools** > **Defragment hard drive**.

You will be informed when the defragmentation is completed.

Format hard drive

When the hard drive is formatted, all data on the drive is permanently lost. Back up data you want to keep before formatting the hard drive. You can use Nokia PC Suite to back up data to a compatible PC. If your device needs to be repaired or replaced, a back-up copy is required to restore data protected by digital rights management technologies (DRM).

To format the hard drive, select Options >Tools > Format hard drive > Quick format or Full format. Use Full format to completely clean the disk. This may be necessary if you give your device to someone else and you want to erase all the personal data first. Use Full format also if you have disk corruption problems. If corrupted sectors are found, Full format will isolate those sectors to prevent further problems. Use Quick format for a previously formatted disk just to quickly erase the content.

Formatting is not a 100% safe way to destroy confidential data. Standard formatting only marks the formatted area as available space and deletes the address to find the files again. The recovery of formatted or even overwritten data may still be possible with special recovery tools and software.

Digital rights management technologies may prevent some back-up data from being restored. Contact your service provider for more information about DRM used for your content.

Digital rights management (DRM) protected content comes with an associated activation key that defines your rights to use the content. If your device has WMDRM protected content both the activation keys and the content will be lost if the device memory is formatted. You may also lose the activation keys and the content in case the files on your device get corrupted. Losing the activation keys or the content may limit your ability to use the same content on your device again. For more information, contact your service provider.

If your device has OMA DRM protected content, the only way to back up both the activation keys and the content is to use the backup feature of Nokia PC Suite. Other transfer methods may not transfer the activation keys which need to be restored with the content for you to be able to continue the use of OMA DRM protected content after the device memory is formatted. You may also need to restore the activation keys in case the files on your device get corrupted.



Digital Rights Management

Content owners may use different types of digital rights management technologies (DRM) to protect their intellectual property, including copyrights. This device uses various types of DRM software to access DRM protected content. With this device you can access content protected with WMDRM 10, OMA DRM 1.0 and OMA DRM 2.0. If certain DRM software fails to protect the content, content owners may ask that such software's ability to access new DRM protected content be revoked. Revocation may also prevent renewal of such DRM protected content already in your device. Revocation of such DRM software does not affect the use of content protected with other types of DRM or the use of non-DRM-protected content.

To view activation keys for DRM protected content stored in your device, press $\{g\}$, and select Tools > Actv. keys and from the following:

Valid keys—View keys that are connected to one or more media files and keys whose validity period has not started yet.

Invalid keys—View keys that are not valid; the time period for using the media file is exceeded or there is a protected media file in the device but no connected activation key.

Not in use-View keys that have no media files connected to them in the device.

To buy more usage time or extend the usage period for a media file, select an invalid activation key and **Options** > **Get activation key**. Activation keys cannot be updated if Web service message reception is disabled. See 'Web service messages', p. 52.

Troubleshooting

Q&A

Bluetooth connectivity

Q: Why can't I find my friend's device?

A: Check that both devices have activated Bluetooth connectivity.

Check that the distance between the two devices is not over 10 metres and that there are no walls or other obstructions between the devices.

Check that the other device is not in hidden mode. Check that both devices are compatible.

- Q: Why can't I end a Bluetooth connection?
- A: If another device is connected to your phone, you can either end the connection using the other device or by deactivating Bluetooth connectivity. Select Connect. > Bluetooth > Off.

Multimedia messaging

- Q: What should I do when the phone cannot receive a multimedia message because memory is full?
- A: The amount of memory needed is indicated in the error message: Not enough memory to retrieve message. Delete some data first. To view what kind of data you have and how much memory the different data groups

consume, select File manager > Options > Memory details.

- **Q:** The note **Retrieving message** is shown briefly. What is happening?
- A: The phone is trying to retrieve a multimedia message from the multimedia messaging centre. Check that the settings for multimedia messaging are defined correctly and that there are no mistakes in phone numbers or addresses. Select Messaging > Options > Settings > Multim. msg..

Messaging

- Q: Why can't I select a contact?
- A: The contact card does not have a phone number or an e-mail address. Add the missing information to the contact card in Contacts.

Camera

- Q: Why do images look smudgy?
- A: Ensure that the camera lens protection window is clean.

Wallpapers and Themes

Q: I turned my device off for charging and now my personal wallpaper is no longer on the display. What has happened?

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A: This may happen if you store your wallpaper on the harddrive of your N91. Use the device memory to store wallpapers and themes.

Calendar

- **Q:** Why are the week numbers missing?
- A: If you have changed the calendar settings so that the week starts on a day other than Monday, the week numbers are not shown.

Browser services

- Q: What do I do if the following message is displayed: No valid access point defined. Define one in Services settings.?
- A: Insert the correct browser settings. Contact your service provider for instructions.

Log

- Q: Why does the log appear empty?
- A: You may have activated a filter, and no communication events fitting that filter have been logged. To see all events, select My Own > Log. Scroll right and select Options > Filter > All communication.
- Q: How do I delete my log information?
- A: Select My Own > Log > Options > Clear log or go to Settings > Log duration > No log. These will erase the log contents, recent calls register, and message delivery reports permanently.

PC connectivity

- Q: Why do I have problems in connecting the phone to my PC?
- A: Make sure that Nokia PC Suite is installed and running on your PC. See the User Guide for Nokia PC Suite on the CD-ROM. If Nokia PC Suite is installed and running, you can use Nokia Get connected wizard available in Nokia PC Suite to connect to your PC. For further information on how to use Nokia PC Suite, see the help function on Nokia PC Suite or visit the support pages at www.nokia.com.

Access codes

Q: What is my password for the lock, PIN, or PUK codes?

A: The default lock code is **12345**. If you forget or lose the lock code, contact your phone dealer.

If you forget or lose a PIN or PUK code, or if you have not received such a code, contact your network service provider.

For information about passwords, contact your access point provider, for example, a commercial Internet service provider (ISP), service provider, or network operator.

Application not responding

- Q: How do I close an application that is not responding?
- A: Open the application switching window by pressing and holding $f_{\mathcal{G}}^{\alpha}$. Then scroll to the application, and press **C** to close the application.

Phone display

Q: Why do missing, discoloured, or bright dots appear on the screen every time I turn on my phone?

A: This is a characteristic of this type of display. Some displays may contain pixels or dots that remain on or off. This is normal, not a fault.

Memory low

- Q: What can I do if my phone memory is low?
- A: You can delete the following items regularly to avoid low memory:
- Messages from Inbox, Drafts, and Sent folders in Messag.
- · Retrieved e-mail messages from the phone memory
- Saved browser pages
- Images and photos in Gallery

To delete contact information, calendar notes, call timers, call cost timers, game scores, or any other data, go to the respective application to remove the data. If you are deleting multiple items and any of the following notes are shown: Not enough memory to perform operation. Delete some data first. or Memory low. Delete some data., try deleting items one by one (starting from the smallest item).

Q: How can I save my data before a software update?

- A: Always save your data if you are planning a software update. Save your data using the following method:
- 1 Back up your device memory using Nokia PC suite.
- 2 Use a data cable connection in Data transfer mode to copy all your files (music, videos, images, documents, uninstalled applications, themes and so on) from the hard drive to your PC.

- **3** Make sure that everything of any value has been copied to your PC. Format the hard drive. For more information, see 'Format hard drive', p. 118
- 4 Proceed with the software update.
- 5 To reset your device memory, enter *#7370# and the code 12345.
- **6** Restore your device memory from the backup with Nokia PC Suite.
- 7 Copy your hard drive contents back from your PC to the formatted hard drive.
- 8 Reinstall the applications and themes.

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Battery information

Charging and discharging

Your device is powered by a rechargeable battery. The full performance of a new battery is achieved only after two or three complete charge and discharge cycles. The battery can be charged and discharged hundreds of times but it will eventually wear out. When the talk and standby times are noticeably shorter than normal, replace the battery. Use only Nokia approved batteries, and recharge your battery only with Nokia approved chargers designated for this device.

Unplug the charger from the electrical plug and the device when not in use. Do not leave fully charged battery connected to a charger, since overcharging may shorten its lifetime. If left unused, a fully charged battery will lose its charge over time.

If the battery is completely discharged, it may take several minutes before the charging indicator appears on the display or before any calls can be made.

Use the battery only for its intended purpose. Never use any charger or battery that is damaged.

Do not short-circuit the battery. Accidental short-circuiting can occur when a metallic object such as a coin, clip, or pen causes direct connection of the positive (+) and negative (-) terminals of the battery. (These look like metal strips on the battery.) This might happen, for example, when you carry a spare battery in your pocket or purse. Short-circuiting the terminals may damage the battery or the connecting object.

Leaving the battery in hot or cold places, such as in a closed car in summer or winter conditions, will reduce the capacity and lifetime of the battery. Always try to keep the battery between 15°C and 25°C (59°F and 77°F). A device with a hot or cold battery may not work temporarily, even when the battery is fully charged. Battery performance is particularly limited in temperatures well below freezing.

Do not dispose of batteries in a fire as they may explode. Batteries may also explode if damaged. Dispose of batteries according to local regulations. Please recycle when possible. Do not dispose as household waste.

Nokia battery authentication guidelines

Always use original Nokia batteries for your safety. To check that you are getting an original Nokia battery, purchase it from an authorized Nokia dealer, look for the Nokia Original Enhancements logo on the packaging and inspect the hologram label using the following steps:

Successful completion of the four steps is not a total assurance of the authenticity of the battery. If you have any reason to believe that your battery is not an authentic original

Nokia battery, you should refrain from using it and take it to the nearest authorized Nokia service point or dealer for assistance. Your authorized Nokia service point or dealer will inspect the battery for authenticity. If authenticity cannot be verified, return the battery to the place of purchase.

Authenticate hologram

- When looking at the hologram on the label, you should see the Nokia connecting hands symbol from one angle and the Nokia Original Enhancements logo when looking from another angle.
- 2 When you angle the hologram left, right, down, and up, you should see 1, 2, 3, and 4 dots on each side respectively.
- 3 Scratch the side of the label to reveal a 20-digit code, for example 12345678919876543210. Turn the battery so that the numbers are facing upwards. The 20-digit code reads starting from the number at the top row followed by the bottom row.

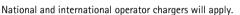






4 Confirm that the 20-digit code is valid by following the instructions at www.nokia.com/batterycheck.

To create a text message, key in the 20-digit code, for example 12345678919876543210, and send to +44 7786 200276.



You should receive a message indicating whether the code can be authenticated.

What if your battery is not authentic?

If you cannot confirm that your Nokia battery with the hologram on the label is an authentic Nokia battery, please do not use the battery. Take it to the nearest authorized Nokia service point or dealer for assistance. The use of a battery that is not approved by the manufacturer may be dangerous and may result in poor performance and damage to your device and its enhancements. It may also invalidate any approval or warranty applying to the device.

To find out more about original Nokia batteries, visit www.nokia.com/battery.

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Care and maintenance

Your device is a product of superior design and craftsmanship and should be treated with care. The suggestions below will help you protect your warranty coverage.

- Keep the device dry. Precipitation, humidity and all types
 of liquids or moisture can contain minerals that will
 corrode electronic circuits. If your device does get wet,
 remove the battery and allow the device to dry completely
 before replacing it.
- Do not use or store the device in dusty, dirty areas. Its moving parts and electronic components can be damaged.
- Do not store the device in hot areas. High temperatures can shorten the life of electronic devices, damage batteries, and warp or melt certain plastics.
- Do not store the device in cold areas. When the device returns to its normal temperature, moisture can form inside the device and damage electronic circuit boards.
- Do not attempt to open the device other than as instructed in this guide.
- Do not drop, knock, or shake the device. Rough handling can break internal circuit boards and fine mechanics.
- Do not use harsh chemicals, cleaning solvents, or strong detergents to clean the device.
- Do not paint the device. Paint can clog the moving parts and prevent proper operation.
- Use a soft, clean, dry cloth to clean any lenses (such as camera, proximity sensor, and light sensor lenses).
- Use only the supplied or an approved replacement antenna. Unauthorised antennas, modifications, or

attachments could damage the device and may violate regulations governing radio devices.

- Use chargers indoors.
- Always create a backup of data you want to keep (such as contacts and calendar notes) before sending your device to a service facility.

All of the above suggestions apply equally to your device, battery, charger, or any enhancement. If any device is not working properly, take it to the nearest authorized service facility for service.

Additional safety information

Operating environment

Remember to follow any special regulations in force in any area and always switch off your device when its use is prohibited or when it may cause interference or danger. Use the device only in its normal operating positions. This device meets RF exposure guidelines when used either in the normal use position against the ear or when positioned at least 1.5 cm (5/8 in) away from the body. When a carry case, belt clip or holder is used for body-worn operation, it should not contain metal and should position the device the above-stated distance from your body.

In order to transmit data files or messages, this device requires a good quality connection to the network. In some cases, transmission of data files or messages may be delayed until such a connection is available. Ensure the above separation distance instructions are followed until the transmission is completed.

Parts of the device are magnetic. Metallic materials may be attracted to the device, and persons with a hearing aid should not hold the device to the ear with the hearing aid. Do not place credit cards or other magnetic storage media near the device, because information stored on them may be erased.

Medical devices

Operation of any radio transmitting equipment, including wireless phones, may interfere with the functionality of inadequately protected medical devices. Consult a physician or the manufacturer of the medical device to determine if they are adequately shielded from external RF energy or if you have any questions. Switch off your device in health care facilities when any regulations posted in these areas instruct you to do so. Hospitals or health care facilities may be using equipment that could be sensitive to external RF energy.

Pacemakers Pacemaker manufacturers recommend that a minimum separation of 15.3 cm (6 in) be maintained between a wireless phone and a pacemaker to avoid potential interference with the pacemaker. These recommendations are consistent with the independent research by and recommendations of Wireless Technology Research. Persons with pacemakers should:

- always keep the device more than 15.3 cm (6 in) from their pacemaker;
- not carry the device in a breast pocket; and
- hold the device to the ear opposite the pacemaker to minimise the potential for interference.

If you suspect interference, switch off your device and move the device away.

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Hearing aids Some digital wireless devices may interfere with some hearing aids. If interference occurs, consult your service provider.

Vehicles

RF signals may affect improperly installed or inadequately shielded electronic systems in motor vehicles such as electronic fuel injection systems, electronic antiskid (antilock) braking systems, electronic speed control systems, air bag systems. For more information, check with the manufacturer or its representative of your vehicle or any equipment that has been added.

Only qualified personnel should service the device, or install the device in a vehicle. Faulty installation or service may be dangerous and may invalidate any warranty that may apply to the device. Check regularly that all wireless device equipment in your vehicle is mounted and operating properly. Do not store or carry flammable liquids, gases, or explosive materials in the same compartment as the device, its parts, or enhancements. For vehicles equipped with an air bag, remember that air bags inflate with great force. Do not place objects, including installed or portable wireless equipment in the area over the air bag or in the air bag deployment area. If in-vehicle wireless equipment is improperly installed and the air bag inflates, serious injury could result.

Using your device while flying in aircraft is prohibited. Switch off your device before boarding an aircraft. The use of wireless teledevices in an aircraft may be dangerous to the operation

of the aircraft, disrupt the wireless telephone network, and may be illegal.

Potentially explosive environments

Switch off your device when in any area with a potentially explosive atmosphere and obey all signs and instructions. Potentially explosive atmospheres include areas where you would normally be advised to turn off your vehicle engine. Sparks in such areas could cause an explosion or fire resulting in bodily injury or even death. Switch off the device at refuelling points such as near gas pumps at service stations. Observe restrictions on the use of radio equipment in fuel depots, storage, and distribution areas, chemical plants or where blasting operations are in progress. Areas with a potentially explosive atmosphere are often but not always clearly marked. They include below deck on boats, chemical transfer or storage facilities, vehicles using liquefied petroleum gas (such as propane or butane), and areas where the air contains chemicals or particles such as grain, dust or metal powders.

Emergency calls

Important: Wireless phones, including this device, operate using radio signals, wireless networks, landline networks, and user-programmed functions. Because of this, connections in all conditions cannot be guaranteed. You should never rely solely on any wireless device for essential communications like medical emergencies.

To make an emergency call:

1 If the device is not on, switch it on. Check for adequate signal strength.

Some networks may require that a valid SIM card is properly inserted in the device.

- 2 Press as many times as needed to clear the display and ready the device for calls.
- **3** Enter the official emergency number for your present location. Emergency numbers vary by location.
- 4 Press the
 key.

When making an emergency call, give all the necessary information as accurately as possible. Your wireless device may be the only means of communication at the scene of an accident. Do not end the call until given permission to do so.

Warning: In the offline profile you cannot make (or receive) any calls, except make calls to certain emergency numbers, or use other features that require network coverage.

Certification information (SAR)

This mobile device meets guidelines for exposure to radio waves.

Your mobile device is a radio transmitter and receiver. It is designed not to exceed the limits for exposure to radio waves recommended by international guidelines. These guidelines were developed by the independent scientific organization ICNIRP and include safety margins designed to assure the protection of all persons, regardless of age and health.

The exposure guidelines for mobile devices employ a unit of measurement known as the Specific Absorption Rate or SAR. The SAR limit stated in the ICNIRP guidelines is 2.0 watts/ kilogram (W/kg) averaged over 10 grams of tissue. Tests for SAR are conducted using standard operating positions with the device transmitting at its highest certified power level in all tested frequency bands. The actual SAR level of an operating device can be below the maximum value because the device is designed to use only the power required to reach the network. That amount changes depending on a number of factors such as how close you are to a network base station. The highest SAR value under the ICNIRP guidelines for use of the device at the ear is 0.48 W/kg.

Use of device accessories and enhancements may result in different SAR values. SAR values may vary depending on national reporting and testing requirements and the network band. Additional SAR information may be provided under product information at www.nokia.com.

Your mobile device is also designed to meet the requirements for exposure to radio waves established by the Federal Communications Commission (USA) and Industry Canada. These requirements set a SAR limit of 1.6 W/kg averaged over 1 gram of tissue. The highest SAR value reported under this standard during product certification for use at the ear is 0.74 W/kg and when properly worn on the body is 0.58 W/kg. Information about this device model can be found at http:// www.fcc.gov/oet/fccid by searching the equipment authorization system using FCC ID: QEYRM-43.

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