

Nokia N82 User Guide

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9205734
Issue 1



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CE 0434 

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Export controls

This device may contain commodities, technology or software subject to export laws and regulations from the US and other countries. Diversion contrary to law is prohibited.

FCC/INDUSTRY CANADA NOTICE

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 following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation. Any changes or modifications not expressly approved by Nokia could void the user's authority to operate this equipment.

9205734/Issue 1

R
A
F
T



Contents

For your safety	7	Camera.....	23
About your device.....	8	About the camera.....	23
Network services.....	9	Image capture.....	23
Enhancements, batteries, and chargers.....	9	Video recording.....	29
Get connected.....	11	Camera settings.....	31
Useful information.....	12	Gallery.....	34
Help.....	12	View and organise files.....	34
Get started.....	12	Images and video clips.....	35
Extended user guide.....	12	Edit images.....	37
Additional applications.....	12	Edit videos.....	38
Software updates.....	12	TV-out mode.....	38
Settings.....	13	Presentations.....	39
Access codes.....	13	Print images.....	39
Prolong battery life.....	14	Share images and videos online.....	40
Free memory.....	15	Home network.....	41
Your device.....	16	Positioning (GPS).....	45
Welcome.....	16	About GPS.....	45
Transfer content.....	16	GPS receiver.....	46
Display indicators.....	17	About satellite signals.....	46
Fast downloading.....	18	Maps.....	47
Shortcuts.....	19	Landmarks.....	52
Multimedia menu.....	19	GPS data.....	53
Mobile Search.....	20	Web browser.....	55
Games.....	20	Browse the web.....	55
Headset.....	21	Navigate pages.....	56
Volume and loudspeaker control.....	21	Web feeds and blogs.....	56
Offline profile.....	21	Bookmarks.....	57

Empty the cache.....	57	Messaging main view.....	79
End the connection.....	58	Write and send messages.....	79
Connection security.....	58	Messaging inbox.....	81
Web settings.....	58	Mailbox.....	82
		Messaging settings.....	83
Connections.....	60	Make calls.....	88
Wireless LAN.....	60	Voice calls.....	88
Connection manager.....	62	Voice and video mailboxes.....	88
Bluetooth connectivity.....	62	Answer or decline a call.....	88
USB.....	65	Make a video call.....	89
PC connections.....	66	Answer or decline a video call.....	90
		Internet calls.....	90
Nokia Video Centre.....	67	Log.....	92
Find and view videos.....	67	Contacts (phonebook).....	93
Internet videos.....	68	Save and edit names and numbers.....	93
Play downloaded videos.....	68	Add ringing tones for contacts.....	93
Transfer videos from your PC.....	68	Copy contacts.....	94
Settings.....	69	Applications folder.....	95
		Calculator.....	95
Music folder.....	70	Application manager.....	95
Music player.....	70	Tools folder.....	98
Nokia Music Store.....	74	File manager.....	98
		Memory card tool.....	98
Media folder.....	75	Settings.....	99
RealPlayer	75	General settings.....	99
Activation keys.....	76	Phone settings.....	103
		Connection settings.....	105
Personalise your device.....	77	Battery information.....	109
Themes.....	77		
Profiles—set tones.....	77		
Modify the standby mode.....	78		
Modify the main menu.....	78		
Messaging.....	79		





Contents

Charging and discharging.....109
Nokia battery authentication guidelines.....110
Care and maintenance.....112
Disposal.....113
Additional safety information.....114
Small children.....114
Operating environment.....114
Medical devices.....114
Vehicles.....115
Potentially explosive environments.....116
Emergency calls.....116
Certification information (SAR).....117
Index.....118

D
R
A
F
T



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 positions as explained in the product documentation. Do not touch the antenna areas 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.

For your safety



BACK-UP COPIES

Remember to make back-up copies or keep a written record of all important information stored in your device.



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 end key as many times as needed to clear the display and return to the standby mode. Enter the emergency number, then press the call key. 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 (E)GSM 850, 900, 1800, and 1900 and UMTS 2100 networks. Contact your service provider for more information about networks.

The 2100 MHz UMTS (HSDPA) is not used in North America and has been turned off in your device. To activate the 2100 MHz UMTS frequency for use outside North America, press , and select **Tools** >

Settings > **Phone** > **Network** > **Network mode** > **Dual mode**.

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

Not all networks support all features offered in this device. For instance, video calls, video sharing, push-to-talk, and instant messaging are not compatible with the networks in the United States of America.

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

Your device supports internet connections and other methods of connectivity. Like computers, your device may be exposed to viruses, malicious messages and applications, and other harmful content. Exercise caution and open messages, accept connectivity requests, download content, and accept installations only from trustworthy sources. To increase the security of your devices, consider installing, using, and regularly updating antivirus software, firewall, and other related software on your device and any connected computer.



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.



The office applications support common features of Microsoft Word, PowerPoint, and Excel (Microsoft Office 2000, XP, and 2003). Not all file formats can be viewed or modified.

During extended operation, such as an active video sharing session or high-speed data connection, the device may feel warm. In most cases, this condition is normal. If you suspect the device is not working properly, take it to the nearest authorized service facility.

Your device may have preinstalled bookmarks and links for third-party internet sites. You may also access other third-party sites through your device. Third-party sites are not affiliated with Nokia, and Nokia does not endorse or assume liability for them. If you choose to access such sites, you should take precautions for security or content.

The images in this guide may differ from your device display.

Network services

To use the phone you must have service from a wireless service provider. Many of the features require special network features. These features are not available on all networks; other networks may require that you make specific arrangements with your service provider before you can use the network services. Your service provider can give you instructions 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, these features will not appear on your device menu. Your device may also have a special configuration such as 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 as MMS, browsing, and e-mail require network support for these technologies.

Enhancements, batteries, and chargers


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

Check the model number of any charger before use with this device. This device is intended for use when supplied with power from the DC-4, AC-4, or AC-5 charger and from an AC-1, ACP-8, ACP-9, ACP-12, or LCH-12 charger when used with the CA-44 charger adapter.

The battery intended for use with this device is BP-6MT.



For your safety

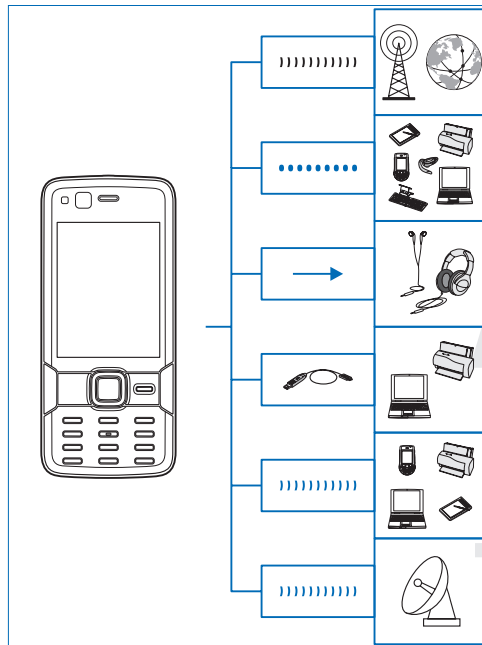
 **Warning:** Use only batteries, chargers, and enhancements approved by Nokia for use with this particular model. The use of any other types may invalidate any approval or warranty, and may be dangerous.

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.

D
R
A
F
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Get connected



Nokia N82 supports the following connectivity methods:

- 2G and 3G networks
- Bluetooth connectivity — to transfer files and connect to compatible enhancements. See "Bluetooth connectivity," p. 62.
- Nokia AV Connector (3.5 mm) — to connect to compatible headsets, headphones, TVs, or home stereo sets. See "TV-out mode," p. 38.
- USB data cable — to connect to compatible devices, such as printers and PCs. See "USB," p. 65.
- Wireless LAN (WLAN) — to connect to the internet and WLAN enabled devices. See "Wireless LAN," p. 60.
- GPS — to connect to GPS satellites to measure your location. See "Positioning (GPS)," p. 45.



Useful information


Model number: Nokia N82-1

Hereinafter referred to as Nokia N82.

For local services and warranty information, please refer to the separate booklet.

Help

Your device has context-sensitive help. When an application is open, select **Options** > **Help** to access help for the current view.

When you are reading the instructions, to switch between help and the application that is open in the background, press and hold .

To open help from the main menu, select **Tools** > **Utilities** > **Help**. Select the desired application to view its help topics.

Get started

See the get started guide for keys and parts information, instructions for setting up the device and for other essential information.

Extended user guide

An extended version of this user guide is available on the product support pages of the Nokia website. Some applications or functionalities, for example, the applications in the **Office** folder, are explained only in the extended user guide.

Additional applications


There are various applications provided by Nokia and different third-party software developers that help you do more with your device. These applications are explained in the guides that are available on the product support pages of the Nokia website.

Software updates

Nokia may produce software updates that may offer new features, enhanced functions, or improved performance. You may be able to request these updates through the Nokia Software Updater PC application. To update the device software, you need the Nokia Software Updater application and a

compatible PC with Microsoft Windows 2000, XP, or Vista operating system, broadband internet access, and a compatible data cable to connect your device to the PC.

To get more information and to download the Nokia Software Updater application, visit www.nokiausa.com/softwareupdate in the United States or www.latinamerica.nokia.com/nsu in Latin America.

 **Tip:** To check the software version in your device, enter ***#0000#** in the standby mode.

Settings

Your device normally has MMS, GPRS, streaming, and mobile internet settings automatically configured in the device, based upon your network service provider information. You may have settings from your service providers already installed in your device, or you may receive or request the settings from the network service providers as a special message.

You can change the general settings in your device, such as language, standby mode, display, and keypad lock settings. See "General settings," p. 99.

Access codes

If you forget any of the access 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 code is blocked, and you need the PUK code to unblock it.
- 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.
- 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. Try entering the code only once, if you forget the code. If the code you entered is not correct, contact a Nokia Care point or your service provider for further instructions.
- 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.

Prolong battery life

Many features in your device increase the demand on battery power and reduce the battery life time. To save battery power, note the following:

- Features that use Bluetooth technology, or allowing such features to run in the background while using other features, increase the demand on battery power. Turn Bluetooth technology off when you do not need it.
- Features that use wireless LAN (WLAN), or allowing such features to run in the background while using other features, increase the demand on battery power. WLAN on your Nokia device switches off when you are not trying to connect, not connected to an access point, or not scanning for available networks. To further reduce battery consumption, you can specify that your device does not scan, or scans less often, for available networks in the background.

- If you have set **Packet data connection** to **When available** in connection settings, and there is no packet data coverage (GPRS), the device periodically tries to establish a packet data connection. To prolong the operating time of your device, select **Packet data connection** > **When needed**.

- The Maps application downloads new map information when you scroll to new areas on the map, which increases the demand on battery power. You can prevent the automatic download of new maps. See "Maps," p. 47.

- If the signal strength of the cellular network varies much in your area, your device must scan for the available network repeatedly. This increases the demand on battery power.

If the network mode is set to dual mode in the network settings, the device searches for the UMTS network. You can set the device to use only the GSM network. See "Network settings," p. 104.

- The backlight of the display increases the demand on battery power. In the display settings, you can change the time-out after which the backlight is switched off, and adjust the light sensor that observes lighting conditions and adjusts the display brightness. See "Personalisation settings," p. 99.

- Leaving applications running in the background increases the demand on battery power. To close the applications you do not use, press and hold **⌘**, scroll to an application in the list, and press **C**.

Pressing **C** does not close Music player. To close Music player, select it from the list and **Options > Exit**.

Free memory

Many features of the device use memory to store data. The device notifies you if the device memory or the memory card memory (if available) is low.

To view how much memory different data types consume, press **⌘**, and select **Options > Memory details**.

To free device memory, transfer data to a compatible memory card (if available) or to a compatible PC.

To remove data you no longer need, use File manager or go to the respective application. You can remove the following:

- Messages in the folders in Messaging and retrieved e-mail messages from the mailbox
- Saved web pages
- Contact information

- Calendar notes
- Applications shown in Application manager that you do not need
- Installation files (.sis or .six) of applications you have installed. Back up the installation files to a compatible PC using Nokia Nseries PC Suite.
- Images and video clips in Gallery. Back up the files to a compatible PC using Nokia Nseries PC Suite.

If you are deleting multiple items and **Not enough memory to perform operation. Delete some data first. or Memory low. Delete some data from phone memory.** is shown, delete items one by one, beginning with the smallest items.

Your device

Welcome

When you switch on your device, the Welcome application is displayed.

Select from the following:

- **Sett. wizard** — to configure various settings, such as e-mail. For more information on the Settings wizard application, see the guides available at the Nokia product support pages or your local Nokia website.
- **Switch** — to transfer content, such as contacts and calendar entries, from a compatible Nokia device. See "Transfer content," p. 16.

There may also be a demonstration about your device available in the Welcome application.

To access the Welcome application later, press , and select **Tools > Utilities > Welcome**. You can also access the individual applications from their menu locations.


Transfer content

With the Switch application, you can transfer content, such as contacts, between two compatible Nokia devices using Bluetooth connectivity.

The type of content that can be transferred depends on the model of the device from which you want to transfer content. If the other device supports synchronisation, you can also synchronise data between the other device and your device. Your device notifies you if the other device is not compatible.

If the other device cannot be powered on without a SIM card, you can insert your SIM card in it. When your device is switched on without a SIM card, the offline profile is automatically activated.

Transfer content

1. To retrieve data from the other device for the first time, on your device, select **Switch** in the Welcome application, or press , and select **Tools > Utilities > Switch**.
2. Select the connection type you want to use to transfer the data. Both devices must support the selected connection type.

3. If you select Bluetooth connectivity: To have your device search for devices with Bluetooth connectivity, select **Continue**. Select the device from which you want to transfer content. You are asked to enter a code on your device. Enter a code (1-16 digits), and select **OK**. Enter the same code on the other device, and select **OK**. The devices are now paired. See "Pair devices," p. 64.

For some device models, the Switch application is sent to the other device as a message. To install the Switch application on the other device, open the message, and follow the instructions on the display.


4. From your device, select the content you want to transfer from the other device.

Once the transfer has started, you can cancel it and continue later.


Transferring time depends on the amount of data to be transferred.


Content is transferred from the memory of the other device to the corresponding location in your device.


Display indicators


 The device is being used in a GSM network (network service).


3G The device is being used in a UMTS network (network service).


 You have one or more unread messages in the **Inbox** folder in Messaging.

 You have received new e-mail in the remote mailbox.

 There are messages waiting to be sent in the **Outbox** folder.


 You have missed calls.


 The ringing type is set to silent, and the message alert tone and e-mail alert tone are set to off.


 The device keypad is locked.


 A clock alarm is active.

2 The second phone line is being used (network service).




 All calls to the device are diverted to another number (network service). If you have two phone lines, a number indicates the active line.




 A compatible headset is connected to the device.




 A compatible TV out cable is connected to the device.




 A compatible text phone is connected to the device.


D A data call is active (network service).

 A GPRS packet data connection is active (network service).  indicates the connection is on hold and  that a connection is available.

 A packet data connection is active in a part of the network that supports EGPRS (network service).  indicates the connection is on hold and  that a connection is available. The icons indicate that EGPRS is available in the network, but your device is not necessarily using EGPRS in the data transfer.


 A UMTS packet data connection is active (network service).  indicates the connection is on hold and  that a connection is available.


 High-speed downlink packet access (HSDPA) is supported and active (network service).  indicates the connection is on hold and  that a connection is available. See "Fast downloading," p. 18.


 You have set the device to scan for wireless LANs, and a wireless LAN is available (network service). See "About WLAN," p. 60.

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



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

 Bluetooth connectivity is on. See "Bluetooth connectivity," p. 62.

 Data is being transmitted using Bluetooth connectivity. When the indicator is blinking, your device is trying to connect with another device.

 A USB connection is active.

Fast downloading

High-speed downlink packet access (HSDPA, also called 3.5G, indicated by ) is a network service in UMTS networks and provides high-speed data downloads. When HSDPA support in the device is activated and the device is connected to a UMTS network that supports HSDPA, downloading data such as messages, e-mail, and browser pages through the cellular network may be faster. An active HSDPA connection is indicated by . See "Display indicators," p. 17.

You can activate or deactivate support for HSDPA in the device settings. See "Packet data settings," p. 107.

For availability and subscription to data connection services, contact your service provider.

HSDPA only affects the download speed; sending data to the network, such as messages and e-mail, is not affected.

Shortcuts

When in the menus, instead of using the scroll key, you can use the number keys, #, and * to quickly access the applications. For example, in the main menu, press **2** to open Messaging, or **#** to open the application or folder in the corresponding location in the menu.

To switch between open applications, press and hold **↻**. Leaving applications running in the background increases the demand on battery power and reduces the battery life.

To open Gallery, press **⏏** once.

To open the multimedia menu to view the multimedia content you have used most frequently in your device, press the multimedia key.

To start a web connection (network service), in the standby mode, press and hold **0**.

In many applications, to view the most used option items, press the scroll key.

To change the profile, press the power key, and select a profile.

To switch between the **General** and **Silent** profiles, in the standby mode, press and hold **#**. If you have two phone lines (network service), this action switches between the two lines.

To call your voice mailbox (network service), in the standby mode, press and hold **1**.

To open the last dialled numbers list, in the standby mode, press the call key.

To use voice commands, in the standby mode, press and hold the right selection key.

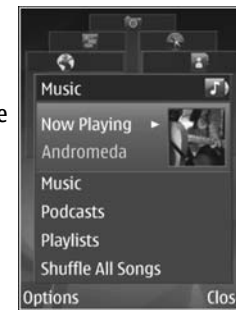
Multimedia menu

With the multimedia menu, you can view your most frequently used multimedia content. The selected content is shown in the appropriate application.

1. To open or close the multimedia menu, press the multimedia key.
2. To browse the tiles, scroll left or right.

The tiles are the following:

- **Music** — Enter Music player and the Now playing view, browse your songs and play lists, or download and manage podcasts.
- **Gallery** — View your last taken picture, start a slide



show of your images, or view media files in albums.


- **Games** — Try out N-Gage games.
- **Maps** — View your favourite locations in the Maps application.
- **Internet** — View your favourite web links in the browser.
- **Contacts** — Add your own contacts, send messages, or make voice calls. To add a new contact to an empty position on the list, press the scroll key, and select a contact. To send a message, in the multimedia menu, select a contact, and **Send text message** or **Send multimedia msg..**

3. To scroll up or down in a tile, press the scroll key up or down. To select items, press the scroll key.

To change the order of the tiles, select **Options > Arrange tiles**.

To return to the multimedia menu from an open application, press the multimedia key.

Mobile Search

Press , and select **Search**.

Use Mobile Search to get access to search engines and find and connect to local services, websites, images, and mobile content. You can also search

content in your device, such as calendar entries, e-mail, and other messages.

For more information, see the extended user guide on the product support pages of the Nokia website.

Games

You can play high-quality multiplayer N-Gage™ games with your device.

Your device includes either one of the following applications in the main menu:


- **Discover N-Gage application** — With this preview application you can get information about the upcoming N-Gage gaming experience, try out game demos, and download and install the full N-Gage application when it becomes available.
- **N-Gage application** — The full featured application gives you access to the complete N-Gage experience replacing the Discover N-Gage application in the menu. You can find new games, try and buy games, find other players, and access scores, events, chat, and more. Some features may not be available at the time of software installation on your device, check www.n-gage.com for software updates.

For the full N-Gage experience, you need internet access on your device, either through the cellular network or wireless LAN. Contact your service provider for more information on data services.

For more information, visit www.n-gage.com.

Headset

You can connect a compatible headset or compatible headphones to your device. You may need to select the cable mode.

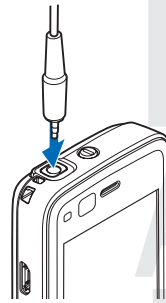
 **Warning:** When you use the headset, your ability to hear outside sounds may be affected. Do not use the headset where it can endanger your safety.

If a headset does not include a microphone, for handsfree phone calls, use such a headset with a compatible remote control unit or the microphone of the device.

You can also connect a compatible TV-out cable to the Nokia AV Connector (3.5 mm) of your device.

Do not connect products that create an output signal as this may cause damage to the device. Do not connect any voltage source to the Nokia AV Connector.

When connecting any external device or any headset, other than those approved by Nokia for




use with this device, to the Nokia AV Connector, pay special attention to volume levels.

Volume and loudspeaker control

To increase or decrease the volume level when you have an active call or are listening to a sound, use the volume key.

The built-in loudspeaker allows you to speak and listen from a short distance without having to hold the device to your ear.



 **Warning:** Do not hold the device near your ear when the loudspeaker is in use, because the volume may be extremely loud.

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


To turn off the loudspeaker, select **Options > Activate handset**.

Offline profile

To activate the offline profile, press the power key briefly, and select **Offline**.

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 **X** in the signal strength indicator area. All wireless RF 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 the offline profile is active, you can use your device without a SIM card.

 **Important:** In the offline profile you cannot make or receive any calls, or use other features that require cellular network coverage. Calls may still be possible to the official emergency number programmed into your device. To make calls, you must first activate the phone function by changing profiles. If the device has been locked, enter the lock code.

To leave the offline profile, press the power key briefly, and select another profile. The device re-enables wireless transmissions (providing there is sufficient signal strength).

Camera

About the camera

Your Nokia N82 has two cameras, a high resolution camera on the back of the device (the main camera, up to 5 megapixels, in landscape mode) and a lower resolution camera on the front (the secondary camera in portrait mode). You can use both cameras to take still pictures and record videos.

Your device supports an image capture resolution of 2592x1944 pixels. The image resolution in this guide may appear different.

The images and video clips are automatically saved in **Images & videos** in Gallery. The cameras produce .jpeg images. Video clips are recorded in the MPEG-4 file format with the .mp4 file extension, or in the 3GPP file format with the .3gp file extension (sharing quality). See "Video settings," p. 33.

You can send images and video clips in a multimedia message, as an e-mail attachment, or by using other connection methods, such as Bluetooth connectivity or wireless LAN connection. You can also upload them to a compatible online album. See "Share images and videos online," p. 40.

Image capture

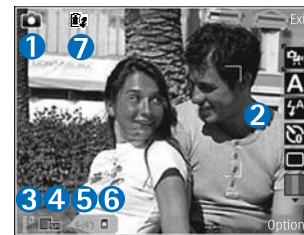
To activate the main camera, open the lens cover by using the camera activation switch.

To activate the main camera when the lens cover is already open, press and hold the capture key.

To close the main camera, close the lens cover.

Still image camera indicators

The still image camera viewfinder displays the following:



- 1 — Capture mode indicator
- 2 — Active toolbar. The toolbar is not displayed during image capture. See "Active toolbar," p. 24.

- 3 — Battery charge level indicator
- 4 — Image resolution indicator, which indicates whether the quality of the image is **Print 5M - Large, Print 3M - Medium, Print 2M - Medium, E-mail 0.8M - Med., or MMS 0.3M - Small**. The quality of a digitally zoomed picture is lower than that of an unzoomed picture.
- 5 — Image counter, which displays the estimated number of images you can capture using the current image quality setting and memory in use. The counter is not displayed during image capture.
- 6 — The device memory (📁) and memory card (📁) indicators, which show where images are saved
- 7 — Xenon flash indicator, which is shown blinking only when the xenon flash is charging

Active toolbar













The active toolbar provides you with shortcuts to different items and settings before and after taking a picture or recording a video. Scroll to items, and select them by pressing the scroll key. You can also define when the active toolbar is visible on the display.

The settings in the active toolbar return to the default settings after you close the camera.

To view the active toolbar before and after taking a picture or recording a video, select **Options > Show icons**. To view the active toolbar only when

you need it, select **Options > Hide icons**. Only the capture mode and battery level indicators are shown on the display. To activate the active toolbar, press the scroll key. The toolbar is visible for 5 seconds.

Before taking a picture or recording a video, in the active toolbar, select from the following:


-  to switch between the video and image modes
-  to select the scene
-  to select the flash mode (images only)
-  to activate the self-timer (images only).
-  to activate the sequence mode (images only).
-  to select a colour effect
-  to show or hide the viewfinder grid (images only)
-  to adjust white balance
-  to adjust the exposure compensation (images only)
-  to adjust sharpness (images only)
-  to adjust contrast (images only)
-  to adjust light sensitivity (images only)

The icons change to reflect the current status of the setting.

The available options vary depending on the capture mode and view you are in. See "After taking a picture," p. 26. See "After recording a video," p. 30. The active toolbar in Gallery has different options. See "Active toolbar," p. 35.

Take pictures

Before taking a picture, note the following:

- You cannot take pictures until the xenon flash is fully charged, unless you have set the flash to **Off**. When the flash is charging,  blinks on the display. Charging the xenon flash usually takes a couple of seconds.
- To make lighting and colour adjustments, use the scroll key to scroll through the active toolbar. See "Setup settings—adjust colour and lighting," p. 32. Saving the captured image may take longer if you change the zoom, lighting, or colour settings.
- To free memory for new pictures, transfer files to a compatible PC using a compatible USB data cable, for example, and delete the files from your device. The device informs you when the memory is full, and asks whether you want to change the memory in use.

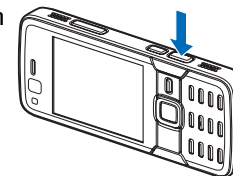
When taking a picture, note the following:

- Use both hands to keep the camera still.



- The quality of a digitally zoomed picture is lower than that of a nonzoomed picture.
- The camera goes into the battery saving mode if there are no keypresses for a moment. To continue taking pictures, press the capture key.

To take a picture, do the following:

1. If the camera is in the video mode, select the image mode from the active toolbar.
2. To lock the focus on an object, press the capture key halfway down (main camera only, not available in landscape and sports scenes). The green locked focus indicator appears on the display. If the focus was not locked, the red focus indicator appears. Release the capture key, and press it halfway down again. You can, however, take the picture without locking the focus.
3. To take a picture, press the capture key. Do not move the device before the image is saved.



To zoom in or out when taking a picture, use the zoom key in your device.

-  **Tip:** To open Gallery and view the pictures you have taken, press  on the side of your device twice.

To activate the front camera, select **Options > Use secondary camera**. To take a picture, press the scroll key. To zoom in or out, scroll up or down.

To leave the camera open in the background and use other applications, press **⌘**. To return to the camera, press and hold the capture key.

After taking a picture

Select the following from the active toolbar (available only if you select **Show captured image > On** in the still image camera settings):

- If you do not want to keep the image, select **Delete** (🗑️).
- To send the image using a multimedia message, e-mail, or other connection methods, such as Bluetooth connectivity, press the call key, or select **Send** (✉️). See "Write and send messages," p. 79. This option is not available during an active call.
You can also send the image to a call recipient during an active call. Select **Send to caller** (📞) (only available during an active call).
- To tag images to the print basket for later printing, select **Add to Print basket** (🖨️).
- To send the image to a compatible online album, select (🌐) (available only if you have set up an

account for a compatible online album). See "Share images and videos online," p. 40.

To zoom in an image after taking it, press (🔍) to open the image in Gallery, and select the zooming option from the options list.

To use the image as wallpaper in the active standby, select **Options > Set as wallpaper**.

To set the image as a call image for a contact, select **Options > Set as contact call img. > Assign to contact**.

To return to the viewfinder to capture a new image, press the capture key.

Flash

The flash is available only in the main camera.

Keep a safe distance when using the flash. Do not use the flash on people or animals at close range. Do not cover the flash while taking a picture.

The camera of your device has a xenon flash for low light conditions. The xenon flash is not available in the sports scene and sequence mode.

You cannot take pictures if the xenon flash is not fully charged, unless you have set the flash to **Off**.

When the flash is charging, (🔋) blinks on the display. Charging the xenon flash usually takes a couple of seconds.

The following flash modes are available for the still image camera: **Automatic** (⚡), **Red-eye** (👁), **On** (🔆), and **Off** (🚫).

To change the flash mode, in the active toolbar, select the desired flash mode.

Scenes

Scenes are only available in the main camera.

A scene helps you to find the right colour and lighting settings for the current environment. The settings of each scene have been set according to a certain style or environment.

The default scene in the image mode is **Auto**, and in the video mode **Automatic** (both indicated with **A**).

To change the scene, in the active toolbar, select **Scene modes** and a scene.

To make your own scene suitable for a certain environment, scroll to **User defined**, and select **Options > Change**. In the user defined scene you can adjust different lighting and colour settings. To copy the settings of another scene, select **Based on scene mode** and the desired scene. To save the changes and return to the scenes list, press **Back**. To activate your own scene, scroll to **User defined**, press the scroll key, and select **Select**.

Take pictures in a sequence

The sequence mode is available only in the main camera.

To set the camera to take six pictures or the desired number of pictures in sequence (if enough memory is available), in the active toolbar, select **Sequence mode**.

To take six pictures, select **Burst**. To capture the pictures, press the capture key.

To take two or more pictures in a sequence, select the desired time interval. To capture pictures using the selected time interval, press the capture key. To stop taking pictures, select **Cancel**. The number of pictures taken depends on the available memory.

After you take the pictures in the burst mode, they are shown in a grid on the display. To view a picture, press the scroll key to open it. If you used a time interval, only the last taken picture is shown on the display. You can view the other pictures in **Images & videos** in Gallery.

You can also use the sequence mode with the self-timer.

To return to the sequence mode viewfinder, press the capture key.

To switch off the sequence mode, in the active toolbar, select **Sequence mode > Single shot**.

You in the picture—self-timer

The self-timer is available only in the main camera. Use the self-timer to delay the capture so that you can include yourself in the picture.

To set the self-timer delay, in the active toolbar, select **Self timer** > **2 seconds**, **10 seconds**, or **20 seconds**.

To activate the self-timer, select **Activate**. The device beeps when the timer is running and the quadrangle blinks just before the image capture. The camera takes the picture after the selected delay elapses.

To switch off the self-timer, in the active toolbar, select **Self timer** > **Off**.



Tip: In the active toolbar, select **Self timer** > **2 seconds** to keep your hand steady when taking a picture.

Tips on taking good photographs

Picture quality

Use the appropriate picture quality. The camera has several picture quality modes. Use the highest setting to make sure that the camera produces the best picture quality available. Note however, that better picture quality requires more storage space. For multimedia message (MMS) and e-mail attachments it may be necessary to use the smallest

picture quality mode optimised for MMS sending. You can define the quality in the camera settings. See "Still image camera settings," p. 31.

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.

Video recording

To activate the main camera, open the lens cover by using the camera activation switch.

To activate the main camera when the lens cover is already open, press and hold the capture key.

To close the main camera, close the lens cover.

Video capture indicators

The video viewfinder displays the following:



- 1 — Capture mode indicator
- 2 — Audio mute on indicator
- 3 — Active toolbar. The toolbar is not displayed during recording. See "Active toolbar," p. 24.
- 4 — The battery charge level indicator
- 5 — Video quality indicator that indicates whether the quality of the video is **TV high quality**, **TV normal quality**, **E-mail high quality**, **E-mail norm. quality**, or **Sharing quality**
- 6 — The video clip file type
- 7 — Total available video recording time. When you are recording, the current video length indicator also shows the elapsed time and time remaining.
- 8 — The device memory (📁) and memory card (📁) indicators that show where videos are saved
- 9 — The video stabilisation is turned on (👤). See "Video settings," p. 33.

To display all viewfinder indicators, select **Options > Show icons**. Select **Hide icons** to display only the video status indicators, and during the recording, the available record time, zoom bar when zooming, and the selection keys.

Record videos

Before recording a video, note the following:

- To make lighting and colour adjustments, scroll through the active toolbar. See "Setup settings—adjust colour and lighting," p. 32.
- To free memory for new video clips, transfer files to a compatible PC using a compatible USB data cable, for example, and remove the files from your device. The device informs you when the memory is full, and asks whether you want to change the memory in use.

To record a video, do the following:

1. If the camera is in the image mode, select the video mode from the active toolbar.
2. To start recording, press the capture key. The red record icon (●) is shown and a tone sounds, indicating that recording has started.
3. To pause recording at any time, press **Pause**. Video recording automatically stops if recording is set to pause and there are no keypresses within a minute. Select **Continue** to resume recording.

To zoom in or out of the subject, use the zoom key in your device.

4. To stop recording, select **Stop**. The video clip is automatically saved to the **Images & videos** folder of Gallery. The maximum length of the video clip depends on the available memory.

To activate the front camera, select **Options > Use secondary camera**. To start recording a video, press the scroll key. To zoom in or out, scroll up or down.

After recording a video

After you record a video clip, select the following from the active toolbar (available only if **Show captured video** is set to **On** in the video settings):

- To immediately play the video clip you just recorded, select **Play** (▶).
- If you do not want to keep the video, select **Delete** (🗑).
- To send the video clip using a multimedia message, e-mail, or other connection methods, such as Bluetooth connectivity, press the call key, or select **Send** (✉). See "Write and send messages," p. 79. See "Send data using Bluetooth connectivity," p. 64. This option is not available during an active call. You may not

be able to send video clips saved in the .mp4 file format in a multimedia message.

You can also send the video clip to a call recipient during an active call. Select **Send to caller** (📧) (only available during an active call).

- To upload the video clip to a compatible online album, select 📁 (only available if you have set up an account for a compatible online album). See "Share images and videos online," p. 40.
- To return to the viewfinder to record a new video clip, press the capture key.

Camera settings

There are two kinds of settings for the camera: setup settings and main settings. The setup settings return to the default settings after you close the camera, but the main settings remain the same until you change them again. To adjust the setup settings, use the options in the active toolbar. See "Setup settings—adjust colour and lighting," p. 32. To change the main settings, in the image or video mode, select **Options** > **Settings**.

Still image camera settings

To change the main settings, in the image mode, select **Options** > **Settings** and from the following:

- **Image quality** — Select **Print 5M - Large** (2592x1944 resolution), **Print 3M - Medium** (2048x1536 resolution), **Print 2M - Medium** (1600x1200 resolution), **E-mail 0.8M - Med.** (1024x768 resolution), or **MMS 0.3M - Small** (640x480 resolution). The better the image quality, the more memory the image consumes. If you want to print the image, select **Print 5M - Large**, **Print 3M - Medium**, or **Print 2M - Medium**. If you want to send it using e-mail, select **E-mail 0.8M - Med.**. To send the image using a multimedia message, select **MMS 0.3M - Small**.

These resolutions are only available in the main camera.

- **Add to album** — Select whether you want to save the image to a certain album in Gallery. If you select **Yes**, a list of available albums opens.
- **Show captured image** — Select **On** if you want to see the captured image after it is taken or **Off** if you want to continue taking pictures immediately.
- **Default image name** — Define the default name for the captured images.
- **Extended digital zoom** (main camera only) — **On (continuous)** allows the zoom increments to be smooth and continuous between digital and extended digital zoom, **On (paused)** allows the zoom increments to pause at the digital and

extended digital step point, and **Off** allows a limited amount of zoom while retaining the image resolution.

- **Capture tone** — Select the tone you want to hear when you take a picture.
- **Memory in use** — Select where you want to store your images.
- **Rotate image** — Select whether you want images that are captured when the device is held upright to be rotated when you open them in Gallery.
- **Restore camera settings** — Select **Yes** to return the default values to the camera settings.

Setup settings—adjust colour and lighting

To enable the camera to reproduce colours and lighting more accurately or to add effects to your pictures or videos, scroll through the active toolbar, and select from the following options:

- **Flash mode** (⚡) (images only) — Select the desired flash mode.
- **Colour tone** (🎨) — Select a colour effect from the list.
- **White balance** (☀️) — Select the current lighting condition from the list. This allows the camera to reproduce colours more accurately.

- **Exposure compensation** (⦿) (images only) — If you are shooting a dark subject against a very light background, such as snow, adjust the exposure to +1 or +2 to compensate the background brightness. For light subjects against a dark background, use -1 or -2.
- **Sharpness** (🔍) (images only) — Adjust the sharpness of the image.
- **Contrast** (📊) (images only) — Adjust the difference between the lightest and darkest parts of the image.
- **Light sensitivity** (📷) (images only) — Increase the light sensitivity in low light conditions to decrease the risk of images that are too dark.

The screen display changes to match any settings you make so that you see how the change affects the pictures or videos.

The available settings vary depending on the selected camera.

The setup settings are camera specific; if you change the settings in the secondary camera, the settings in the main camera do not change. The setup settings are also shooting mode specific; if you change the settings in the image mode, the settings in the video mode do not change. Switching between the modes does not reset the defined setup settings.

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

If you select a new scene, the colour and lighting settings are replaced by the selected scene. You can change the setup settings after selecting a scene if needed.

For more information on the scenes, see the extended user guide on the product support pages of the Nokia website.

Video settings


To change the main settings, in the video mode, select **Options** > **Settings** and from the following:



- **Video quality** — Set the quality of the video clip to **TV high quality**, **TV normal quality**, **E-mail high quality**, **E-mail norm. quality** (standard quality for playback through your handset), or **Sharing quality**. If you want to view the video on a compatible TV or PC, select **TV high quality** or **TV normal quality**, which have VGA resolution (640x480) and the .mp4 file format. You may not be able to send video clips saved in the .mp4 file format in a multimedia message. To send the video clip using a multimedia message, select **Sharing quality**, which has QCIF resolution and the .3gp file format.
- **Video stabilisation** — Select **On** to reduce camera shaking when recording the video.

- **Audio recording** — Select **Mute** if you do not want to record sound.
- **Add to album** — Select whether you want to add the recorded video clip to a certain album in Gallery. Select **Yes** to open a list of available albums.
- **Show captured video** — Select whether you want the first frame of the recorded video clip to be displayed after the recording stops. Select **Play** from the active toolbar (main camera) or **Options** > **Play** (secondary camera) to view the video clip.
- **Default video name** — Define the default name for the captured video clips.
- **Memory in use** — Select where you want to store your videos.
- **Restore camera settings** — Select **Yes** to return the default values to the camera settings.










Gallery

To store and organise your images, video clips, sound clips, and streaming links, or share your files with other compatible Universal Plug and Play (UPnP) devices through wireless LAN (WLAN), press , and select **Gallery**.


 **Tip:** If you are in another application, to view the last saved picture in Gallery, press  on the side of your device. To enter the **Images & videos** folder main view, press the review key again.

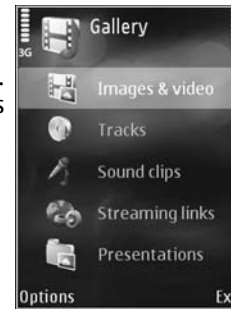
View and organise files

Press , and select **Gallery**.

In Gallery, select **Images & videos** , **Tracks** , **Sound clips** , **Streaming links** , **Presentations** , or **All files** , and press the scroll key to open it.

You can browse and open folders; and mark, copy, and move items to folders. You can also create albums and mark, copy, and add items to albums. See "Albums," p. 36.

Files stored on your compatible memory card (if inserted) are indicated with .



To open a file, press the scroll key. Video clips, .ram files, and streaming links open and play in RealPlayer, and music and sound clips in Music player. See "RealPlayer," p. 75. See "Music player," p. 70.

To copy or move files to the memory card (if inserted) or to device memory, select a file and **Options > Move and copy > Copy to memory card** or **Move to memory card**, or **Copy to phone mem.** or **Move to phone mem..**

Images and video clips

View images and videos

To view your images and video clips, press **☰**, and select **Gallery > Images & videos**.

Pictures taken and video clips recorded with the camera of your device are stored in **Images & videos**. Images and video clips can also be sent to you in a multimedia message, as an e-mail attachment, or through Bluetooth connectivity. To be able to view a received image or video clip in Gallery or in the RealPlayer, you must first save it.

The video clips saved in Nokia Video Centre are not shown in **Images & videos** in Gallery. See "Nokia Video Centre," p. 67.

The images and video clip files in **Images & videos** are in a loop and ordered by date and time. The number of files is displayed. To browse the files one by one, scroll left or right. To browse files in groups, scroll up or down.



To open a file, press the scroll key. When an image is opened, to zoom in the image, press the zoom key on the side of your device. The zooming ratio is not stored permanently.

If you want the display to be automatically rotated based on the orientation of the device, set the display rotation on in the settings. See "Personalisation settings," p. 99.

To edit a video clip or a photo, select **Options > Edit**.

Active toolbar

In the **Images & videos** folder, you can use the active toolbar as a shortcut to different tasks. The active toolbar is available only when you have selected an image or a video clip.









In the active toolbar, scroll up or down to different items, and select them by pressing the scroll key. The available options vary depending on the view you are in and whether you have selected an image or a video clip.

The settings in the active toolbar return to the default settings after you close the camera.

If you want the active toolbar to always be visible on the display, select **Options > Show icons**.

To view the active toolbar only when you need it, select **Options > Hide icons**. To activate the active toolbar, press the scroll key.

Select from the following:

-  to play the selected video clip
-  to send the selected image or video clip
-  to upload the selected image or video clip to a compatible online album (only available if you have set up an account for a compatible online album). See "Share images and videos online," p. 40.
-  or  to add or remove an image from the print basket.
-  to print the viewed image
-  to start a slide show of your images
-  to delete the selected image or video clip

The available options may vary depending on the view you are in.

Albums


With albums, you can conveniently manage your images and video clips. To view the albums list in Gallery, select **Images & videos > Options > Albums > View albums**.

To create a new album, in the albums list view, select **Options > New album**.

To add a picture or a video clip to an album in Gallery, scroll to a picture or video clip, and select **Options > Albums > Add to album**. A list of albums opens. Select the album to which you want to add the picture or video clip. The item you added to the album is still visible in **Images & videos** in Gallery.

To remove a file from an album, open the album, scroll to the file, and press **C**. The file is not deleted from **Images & videos** in Gallery.

Slide show

To view your images as a slide show, select an image in Gallery, and **Start slide show** () in the active toolbar. The slide show starts from the selected file.

To view only the selected images as a slide show, select **Options > Mark/Unmark > Mark** to mark images, and **Options > Slide show > Start** to start the slide show.

Select from the following:

- **Pause** — to pause the slide show
- **Continue** — to resume the slide show, if paused
- **End** — to close the slide show

To browse the images, scroll left or right.

Before starting the slide show, adjust the slide show settings. Select **Options > Slide show > Settings**, and from the following:

- **Music** — to add sound to the slide show. Select **On** or **Off**.
- **Song** — to select a music file from the list
- **Delay between slides** — to adjust the tempo of the slide show
- **Zoom and pan** — to make the slide show move smoothly from one slide to another, and let Gallery randomly zoom in and out in the images

To decrease or increase the volume during the slide show, use the volume key in your device.

Edit images

Image editor

To edit the pictures after taking them or the ones already saved in Gallery, select **Options > Edit**. The image editor opens.

Select **Options > Apply effect** to open a grid where you can select different edit options indicated by small icons. You can crop and rotate the image; adjust the brightness, colour, contrast, and resolution; and add effects, text, clip art, or a frame to the picture.

Crop image

To crop an image, select **Options > Apply effect > Crop**, and a predefined aspect ratio from the list. To crop the image size manually, select **Manual**.

If you select **Manual**, a cross appears in the upper left corner of the image. Use the scroll key to select the area to crop, and select **Set**. Another cross appears in the lower right corner. Again select the area to be cropped. To adjust the first selected area, select **Back**. The selected areas form a rectangle that forms the cropped image.

If you select a predefined aspect ratio, select the upper left corner of the area to be cropped. To resize the highlighted area, use the scroll key. To freeze the selected area, press the scroll key. To move the area within the picture, use the scroll key. To select the area to be cropped, press the scroll key.

Reduce red-eye

To reduce red-eye in an image, select **Options > Apply effect > Red eye reduction**.

Move the cross onto the eye, and press the scroll key. A loop appears on the display. To resize the loop to fit the size of the eye, use the scroll key. To reduce the redness, press the scroll key. When you finish editing the image, press **Done**.

To save the changes, and return to **Images & videos**, press **Back**.

Useful shortcuts

You can use the following shortcuts when editing images:

- To view a full-screen image, press *****. To return to the normal view, press ***** again.
- To rotate an image clockwise or counterclockwise, press **3** or **1**.
- To zoom in or out, press **5** or **0**.
- To move on a zoomed image, scroll up, down, left, or right.

Edit videos

To edit video clips in Gallery, scroll to a video clip, and select **Options > Edit** and an editing option.

The video editor supports .3gp and .mp4 video file formats, and .aac, .amr, .mp3, and .wav audio file formats. It does not necessarily support all features of a file format or all the variations of file formats.

TV-out mode

To view the captured images and video clips on a compatible TV, use a Nokia Video Connectivity Cable.

Before viewing the images and video clips on TV, you may need to configure the TV-out settings for the applicable TV system and TV aspect ratio. See "Enhancement settings," p. 100.

To watch images and video clips on TV, do the following:

1. Connect a Nokia Video Connectivity Cable to the video input of a compatible TV.
2. Connect the other end of the Nokia Video Connectivity Cable to the Nokia AV Connector of your device.
3. You may need to select the cable mode.
4. Press **⌘**, and select **Gallery > Images & videos** and the file you want to view.

The images are shown in the image viewer, and the video clips are played in RealPlayer.



All audio, including the active calls, stereo video clip sound, key tone, and ringing tone is routed to the TV when the Nokia Video Connectivity Cable is connected to the device. You can use the device microphone normally.

For all applications other than the **Images & videos** folder in Gallery and RealPlayer, the TV screen displays what is displayed on the screen of your device.

The opened image is displayed in full-screen on the TV. When you open an image in the thumbnail view while it is viewed on the TV, zooming in is not available.

When you open a highlighted video clip, RealPlayer starts playing the video clip on the device display and the TV screen. See "RealPlayer," p. 75.

You can view images as a slide show on TV. All items in an album or marked images are displayed on the TV in full-screen while the selected music plays. See "Slide show," p. 36.

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, press **⌘**, and select **Gallery > Presentations**. Scroll to an image, and select **Options > Play**. To pause playing, select **Options > Pause**.

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

To rotate the image 90 degrees clockwise or counterclockwise, press **1** or **3**, respectively. To rotate the image 45 degrees, press **7** or **9**.

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

Print images

Image print

To print images with Image print, select the image you want to print, and the print option in Gallery, camera, image editor, or image viewer.

Use Image print to print your images using a compatible USB data cable, or Bluetooth connectivity. You can also print images using wireless LAN. If a compatible memory card is inserted, you can store the images to the memory card, and print them using a compatible printer.

You can only print images that are in .jpeg format. The pictures taken with the camera are automatically saved in .jpeg format.

Printer selection

To print images with Image print, select the image you want to print, and the print option in Gallery, camera, image editor, or image viewer.

When you use Image print for the first time, a list of available compatible printers is displayed after you

select the image. Select a printer. The printer is set as the default printer.

To print to a printer compatible with PictBridge, connect the compatible data cable before you select the print option, and check that the data cable mode is set to **Image print** or **Ask on connection**. See "USB," p. 65. The printer is automatically displayed when you select the print option.

If the default printer is not available, a list of available printing devices is displayed.

To change the default printer, select **Options > Settings > Default printer**.

Print preview

After you select the printer, the selected images are displayed using predefined layouts.

To change the layout, scroll left or right to browse through the available layouts for the selected printer. If the images do not fit on a single page, scroll up or down to display the additional pages.

Print settings

The available options vary depending on the capabilities of the printing device you selected.

To set a default printer, select **Options > Default printer**.

To select the paper size, select **Paper size**, the size of paper from the list, and **OK**. Select **Cancel** to return to the previous view.

Print online

With Print online, you can order prints of images online directly to your home or to a store where you can pick them up. You can also order different products with the selected image, such as mugs or mouse pads. The available products depend on the service provider.

To use Print online, you must have at least one printing service configuration file installed. The files can be obtained from printing service providers that support Print online.

For more information on the application, see the guides available at the Nokia product support pages or your local Nokia website.

Share images and videos online

You can share images and video clips in compatible online albums, weblogs, or in other compatible online sharing services on the web. You can upload content, save unfinished posts as drafts and continue later, and view the content of the albums.

The supported content types may vary depending on the service provider.

Before sharing images and videos online, you must subscribe to the service with an online image sharing service provider, and create a new account. You can usually subscribe to the service on the web page of the service provider. Contact your service provider for details on subscribing to the service.

To upload a file from Gallery to the online service, press **⌘**, and select **Gallery > Images & videos**. Scroll to the desired file, and select **Options > Send > Post to web**, or select the file and **📧** from the active toolbar.

For more information on the application and compatible service providers, see the Nokia product support pages or your local Nokia website.

Home network

About home network

Your device is compatible with Universal Plug and Play architecture (UPnP). Using a wireless LAN (WLAN) access point device or a WLAN router, you can create a home network and connect compatible UPnP devices that support WLAN to the network, such as your device, a compatible PC, a compatible printer, and a compatible sound system or TV, or a

sound system or TV equipped with a compatible wireless multimedia receiver.

For more information on the home network, see the extended user guide on the product support pages of the Nokia website.

Important security information

When you configure your WLAN home network, enable an encryption method on your access point device, then on the other devices you intend to connect to your home network. Refer to the documentation of the devices. Keep any passcodes secret and in a safe place separate from the devices.

You can view or change the settings of the WLAN internet access point in your device. See "Access points," p. 105.

If you use the ad hoc operating mode to create a home network with a compatible device, enable one of the encryption methods in **WLAN security mode** when you configure the internet access point. See "Connection settings," p. 105. This step reduces the risk of an unwanted party joining the ad hoc network.

Your device notifies you if another device attempts to connect to it and the home network. Do not accept connection requests from an unknown device.

If you use WLAN in a network that does not have encryption, switch off sharing your files with other devices, or do not share any private media files. See "Settings for home network," p. 42.

Settings for home network

To share media files saved in Gallery with other compatible UPnP devices through WLAN, you must create and configure your WLAN home internet access point, then configure the settings for home network in the **Home media** application. See "WLAN internet access points," p. 61. See "Connection settings," p. 105.

The options related to home network are not available in applications before the settings in the **Home media** application have been configured.

When you access the **Home media** application for the first time, the setup wizard opens and helps you define the home network settings for your device. To use the setup wizard later, in the **Home media** main view, select **Options** > **Run wizard**, and follow the instructions on the display.

To connect a compatible PC to the home network, on the PC, you must install the related software. You get the software from the CD-ROM or DVD-ROM supplied with your device, or you can download it from the device support pages on the Nokia website.

Configure settings

To configure the settings for home network, select **Tools** > **Connectivity** > **Home media** > **Settings** and from the following:

- **Home access point** — Select **Always ask** if you want the device to ask for the home access point every time you connect to the home network, **Create new** to define a new access point that is used automatically when you use the home network, or **None**. If your home network does not have WLAN security settings enabled, you get a security warning. You can continue and switch the WLAN security on later; or cancel defining the access point and first switch on the WLAN security. See "Access points," p. 105.
- **Device name** — Enter a name for your device that is shown to the other compatible devices in the home network.
- **Copy to** — Select the memory where you want to save copied media files.

Set sharing on and define content

Select **Tools** > **Connectivity** > **Home media** > **Share content** and from the following:

- **Content sharing** — Allow or deny sharing media files with compatible devices. Do not set content sharing on before you have configured all the other settings. If you set content sharing on, the

other UPnP compatible devices in the home network can view and copy your files you have selected for sharing in the **Images & videos** folder. If you do not want the other devices to access your files, set content sharing off.

- **Images & video** — Select media files for sharing with other devices, or view the sharing status of images and videos. To update the content of the folder, select **Options > Refresh content**.
- **Music** — Select playlists for sharing with other devices, or view the sharing content of playlists. To update the content of the folder, select **Options > Refresh content**.

View and share media files

To share your media files with other UPnP compatible devices in the home network, set content sharing on. See "Set sharing on and define content," p. 42. If content sharing is off in your device, you can still view and copy the media files stored in another home network device if it is allowed by the other device.

Show media files stored in your device

To show your images, videos, and sound clips in another home network device, such as a compatible TV, do the following:

1. In Gallery, select an image, video clip, or sound clip, and **Options > Show via home network**.
2. Select a compatible device in which the media file is shown. The images are shown both in the other home network device and your device, and the video clips and sound clips are played only in the other device.
3. To stop sharing, select **Options > Stop showing**.

Show media files stored in the other device


To show media files that are stored on another home network device in your device (or in a compatible TV, for example), do the following:

1. Press **Ⓜ**, and select **Tools > Connectivity > Home media > Browse home**. Your device starts the search of other compatible devices. Device names start to appear on the display.
2. Select a device from the list.
3. Select the type of media you want to view from the other device. The available file types depend on the features of the other device.
To search files with different criteria, select **Options > Find**. To sort the found files, select **Options > Sort by**.
4. Select the media file or folder you want to view.

5. Press the scroll key, and select **Play** or **Show**, and **On device** or **Via home network**.
6. Select the device in which the file is shown.

To adjust the volume when playing a video or sound clip, scroll left or right.

To stop sharing the media file, select **Back** or **Stop** (available when playing videos and music).

 **Tip:** You can print images saved in Gallery through a home network with a UPnP compatible printer. See "Image print," p. 39. Content sharing does not have to be switched on.

Copy media files

To copy or transfer media files from your device to another compatible device, such as a UPnP compatible PC, select a file in Gallery and **Options > Move and copy > Copy to home network** or **Move to home net..** Content sharing does not have to be switched on.

To copy or transfer files from the other device to your device, select a file in the other device and the desired copying option from the options list. Content sharing does not have to be switched on.

DRAFT



Positioning (GPS)

For information on position requests, see the extended user guide on the product support pages of the Nokia website.

About GPS

The Global Positioning System (GPS) is a worldwide radio navigation system that includes 24 satellites and their ground stations that monitor the operation of the satellites. Your device has an internal GPS receiver.

A GPS terminal receives low-power radio signals from the satellites and measures the travel time of the signals. From the travel time, the GPS receiver can calculate its location to the accuracy of meters.

The coordinates in the GPS are expressed in degrees and decimal degrees format using the international WGS-84 coordinate system.

The Global Positioning System (GPS) is operated by the government of the United States, which is solely responsible for its accuracy and maintenance. 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, natural obstacles, and weather conditions. The GPS receiver should only be used outdoors to allow reception of GPS signals.

Any GPS should not be used for precise location measurement, and you should never rely solely on location data from the GPS receiver and cellular radio networks for positioning or navigation.

Your device also supports Assisted GPS (A-GPS).


Assisted GPS (A-GPS) is used to retrieve assistance data over a packet data connection, which assists in calculating the coordinates of your current location when your device is receiving signals from satellites.


A-GPS is a network service.

Your device is preconfigured to use the Nokia A-GPS service, if no service provider specific A-GPS settings are available. The assistance data is retrieved from the Nokia A-GPS service server only when needed.

You must have a packet data internet access point defined in the device to retrieve assistance data



from the Nokia A-GPS service. To define an access point for A-GPS, press , and select **Tools > Settings > General > Positioning > Positioning server > Access point**. A wireless LAN access point cannot be used for this service. The packet data internet access point is asked when GPS is used for the first time in your device.

To enable or disable different positioning methods, such as Bluetooth GPS, press , and select **Tools > Settings > General > Positioning > Positioning methods**.

GPS receiver

The GPS receiver is located in the top of the device. When using the receiver, from an upright position, move the device to an angle of about 45 degrees, with an unobstructed view of the sky.

Establishing a GPS connection may take from a couple of seconds to several minutes. Establishing a GPS connection in the car may take longer.



The GPS receiver draws its power from the device battery. Using the GPS receiver may drain the battery faster.

About satellite signals

If your device cannot find the satellite signal, consider the following:

- If you are indoors, go outdoors to receive a better signal.
- If you are outdoors, move to a more open space.
- Ensure that your hand does not cover the GPS antenna of your device. See "GPS receiver," p. 46.
- If the weather conditions are bad, the signal strength may be affected.
- If the power saver turns on while the device is attempting to establish a GPS connection, the attempt is interrupted.
- Establishing a GPS connection may take from a couple of seconds to several minutes.

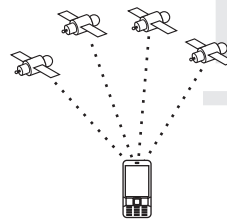
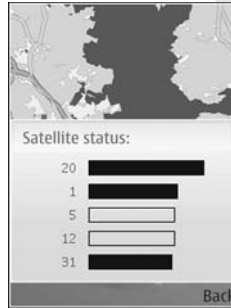


Satellite status

To check how many satellites your device has found, and whether your device is receiving satellite signals, press **⌘**, and select **Tools > Connectivity > GPS data > Position > Options > Satellite status**. Or, in the Maps application, select **Options > Map options > Satellite info**.

If your device has found satellites, a bar for each satellite is shown in the satellite info view. The longer the bar, the stronger the satellite signal. When your device has received enough data from the satellite signal to calculate the coordinates of your location, the bar turns black.

Initially your device must receive signals from at least four satellites to be able to calculate the coordinates of your location. When the initial calculation has been made, it may be possible to continue calculating the



coordinates of your location with three satellites. However, the accuracy is generally better when more satellites are found.

Maps

About Maps

Press **⌘**, and select **Maps**.

With Maps, you can see your current location on the map, browse maps for different cities and countries, search for addresses and different points of interest, plan routes from one location to another, and save locations as landmarks and send them to compatible devices.

You can also purchase extra services, such as guides and a turn-by-turn navigation service with voice guidance.


Maps uses GPS. You can define the positioning methods used with your device in the device settings. See "Positioning settings," p. 103. For the most accurate location information, use either the internal GPS or a compatible external GPS receiver.

When you use Maps for the first time, you may need to define an internet access point for downloading map information for your current location. To change the default access point later, select **Options > Settings > Network > Default access point**.



Almost all digital cartography is inaccurate and incomplete to some extent. Never rely solely on the cartography provided for use in this device.

Downloading maps may involve the transmission of large amounts of data through your service provider's network. Contact your service provider for information about data transmission charges.

 **Tip:** You can also download maps by using a wireless LAN connection or through the internet using Nokia Map Loader PC software. See "Download maps," p. 49.


To receive a note when your device registers to a network outside your home cellular network, select **Options > Settings > Network > Roaming warning > On**. Contact your network service provider for details and roaming costs.

Browse maps


The map coverage varies by country.

When you open the Maps application, Maps zooms in to the location that was saved from your last session. If no position was saved from the last session, the Maps application zooms in to the capital city of the country you are in based on the information the device receives from the cellular network. At the same time, the map of the location is downloaded, if it has not been downloaded during previous sessions.

To establish a GPS connection and zoom in to your current location, select **Options > Find place > GPS position [0]**, or press **0**

A GPS indicator  is shown on the display when you browse maps. When the device tries to establish a GPS connection, the circles are yellow. When the device receives enough data from the satellites to calculate the coordinates of your current location, the circles turn green.

To view information about satellites when you are using Maps, select **Options > Map options > Satellite info**.

Your current location is indicated on the map with .

To move on the map, scroll up, down, left, or right.

To zoom in or out, press * or #.

To switch between the 2D and 3D views, select **Options > Map options > 2D/3D**.

To find a location, select **Options > Find place**. You can choose to go to your GPS position, find an address, find a point of




interest by entering a keyword, find locations nearby, or browse a guide (extra service).

To use a location on the map, for example, as a starting point for a nearby search, to plan a route, view its details, or start navigation (extra service), press the scroll key, and select the desired option.

When you browse the map on the display, for example, move to another country, a new map is downloaded automatically. These downloaded maps are free of charge, but downloading may involve the transmission of large amounts of data through your service provider's network. For more information on data transmission charges, contact your service provider.

The maps are automatically saved in the device memory or on a compatible memory card (if inserted).

To define what kinds of points of interest are shown on the map, select **Options > Map options > Categories** and the desired categories.

To save a location as a landmark, in the desired location, press the scroll key, select **Save > As landmark**, enter a name for the landmark, and select the categories you want to include it in. To take a screen shot of your location, select **Save > As image**. The screen shot is saved in Gallery. To send the screen shot, in Gallery, select the screen shot, and  from the active toolbar.

To view saved landmarks, select **Options > Find place > Landmark**.

To send a landmark to a compatible device, in the landmarks view, press the scroll key, and select **Send**. If you send the landmark in a text message, the information is converted to plain text.

To adjust the network, routing, and general settings, select **Options > Settings**.

Download maps

When you browse the map on the display, for example, move to another country, a new map is downloaded automatically. These downloaded maps are free of charge, but downloading may involve transmission of large amounts of data through your service provider's network. For more information on data transmission charges, contact your service provider.

You can view the amount of transferred data from the data counter (kB) shown on the display. The counter shows the amount of network traffic when you browse maps, create routes, or search for locations online.

To prevent the device from automatically downloading maps through the internet, for example, when you are outside your home cellular network, select **Options > Settings > Network > Use network > Never**.

To define how much memory card space you want to use for saving maps or voice guidance files, select **Options > Settings > Network > Max. memory card use (%)**. This option is available only when a compatible memory card is inserted. When the memory is full, the oldest map data is deleted. The saved maps data can be deleted using Nokia Map Loader PC software.

Nokia Map Loader

Nokia Map Loader is PC software that you can use to download and install maps for different countries from the internet to your device or a compatible memory card (if inserted). You can also use it to download voice files for turn-by-turn navigation.

To use Nokia Map Loader, you must first install it to a compatible PC. You can download the PC software from the internet at www.nokia.com/maps. Follow the instructions on the screen.

You must use the Maps application before using Nokia Map Loader. Nokia Map Loader uses the Maps history information to check the version of map data to be downloaded.

After you have installed the PC software to your PC, to download maps, do the following:

1. Connect your device to the PC by using a compatible USB data cable. Select **Data transfer** as the USB connection mode.

2. Open Nokia Map Loader in your PC. Nokia Map Loader checks the version of map data to be downloaded.
3. Select the maps or voice guidance files you want, and download and install them to your device.

Find a place

To view points of interest near your current location or other locations on the map, select **Options > Find place > Nearby** and a category.

To search for a point of interest by name, select **Options > Find place > Keyword search** or start entering the first letters of the name, and select **Find**.

To search for a location by address, select **Options > Find place > By address**. You must enter the city and country. To use an address you have saved to a contact card in Contacts, select **Options > Find place > By address > Options > Select from contacts**.

To view a search result on the map, press the scroll key, and select **Show on map**. To return to the results list, select **Back**.

To view a list of your previous locations, select **Options > Find place > Recent**.

Plan a route

To plan a route from one location to another (for example, from your home to your office), do the following:


1. Scroll to a point on the map, press the scroll key, and select **Route from**.
2. Scroll to **From**, and select **Options > Select** and the desired option.

To adjust the routing settings, such as the mode of transportation, select **Options > Settings > Routing**.

3. To select the destination, scroll to **To**, and select **Options > Select** and the desired option.
4. To view the route itinerary, select **Options > Show route**. The route is calculated using the selected routing settings.

To view the itinerary route on the map, select **Options > Show on map**.

To run a simulation of the route, select **Options > Start simulation**.

 **Tip:** You can also use a compatible GPS receiver with Bluetooth connectivity with Maps. For example, in a car, an external GPS receiver can be positioned so that it has a clear view of the sky. Enable the use of an

external GPS receiver in positioning settings. See "Positioning settings," p. 103.

Extra services for Maps

You can purchase and download different kinds of guides, such as city and travel guides, for different cities to your device. You can also purchase a turn-by-turn navigation service with voice guidance to use it in Maps.

The downloaded guides are automatically saved to your device.

The licence you purchase for a guide or navigation is device-specific and cannot be transferred from your device to another device.

Navigation

To purchase a navigation service with voice guidance to use in Maps, select **Options > Extra services > Add navigation**.

After purchasing the navigation upgrade, the service is available through Maps.

After creating a route in Maps, to start navigation to the desired destination with GPS using voice guidance, select **Options > Start navigation**. See "Plan a route," p. 51. You can also start navigation by selecting any location on the map or in a results list, and **Navigate to**.

When you use navigation for the first time, you are prompted to select the language of the voice guidance and download the voice guidance files of the selected language. You can also download voice guidance files using Nokia Map Loader. See "Download maps," p. 49. To change the language later, in the Maps main view, select **Options > Settings > General > Voice guidance** and a language, and download the voice guidance files for the selected language.

To discard the created route and use another route, select **Options > Alternative route**.

To view only the next turns and hide the map, select **Options > Map options > Arrow mode**.

To stop navigation, select **Options > Stop navigation**.

Guides

To purchase and download different kinds of guides, such as city and travel guides, for different cities to your device, select **Options > Extra services > Guides**.


The guides provide information about attractions, restaurants, hotels, and other points of interest. The guides must be downloaded and purchased before use.

To browse a downloaded guide, on the **My guides** tab in Guides, select a guide and a subcategory (if available).

To download a new guide to your device, in Guides, scroll right to the **Nearest guides** or **All guides** tab, select the desired guide, and press **Yes**. The purchase process starts automatically. You can pay for the guides through a credit card or have the amount charged to your phone bill (if supported by your cellular network service provider).

To confirm the purchase, select **OK** twice. To receive a confirmation of the purchase through e-mail, enter your name and e-mail address, and select **OK**.

Landmarks

Press , and select **Tools > Connectivity > 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 to them, such as addresses. You can use your saved landmarks in compatible applications, such as **GPS data** and **Maps**.

GPS coordinates are expressed in degrees and decimal degrees format using the international WGS-84 coordinate system.

To create a new landmark, select **Options** > **New landmark**. To make a positioning request for your current location, select **Current position**. 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 select **Options** > **Edit**. Scroll to the desired field, and enter the information.

To view the landmark on the map, select **Options** > **Show on map**. To create a route to the location, select **Options** > **Navigate using map**.


You can sort your landmarks into 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 in Landmarks, and select **Options** > **Add to category**. Scroll to each category to which you want to add the landmark, and select it.

To send one or several landmarks to a compatible device, select **Options** > **Send**. Your received landmarks are placed in the **Inbox** folder in Messaging.

GPS data


GPS data is designed to provide route guidance information to a selected destination, position information about your current location, and traveling information, such as the approximate distance to the destination and approximate duration of travel.

Press , and select **Tools** > **Connectivity** > **GPS data**.

The coordinates in the GPS are expressed in degrees and decimal degrees format using the international WGS-84 coordinate system.

To use GPS data, the GPS receiver of your device must initially receive position information from at least four satellites to calculate the coordinates of your location. When the initial calculation has been made, it may be possible to continue calculating the coordinates of your location with three satellites. However, the accuracy is generally better when more satellites are found.

Route guidance

Press , and select **Tools** > **Connectivity** > **GPS data** > **Navigation**.

Start the route guidance outdoors. If started indoors, the GPS receiver may not receive the necessary information from the satellites.

Route guidance uses a rotating compass on the device display. A red ball shows the direction to the destination, and the approximate distance to it is shown inside the compass ring.

Route guidance is designed to show the straightest route and the shortest distance to the destination, measured in a straight line. Any obstacles on the route, such as buildings and natural obstacles, are ignored. Differences in altitude are not taken into account when calculating the distance. Route guidance is active only when you move.

To set your trip destination, select **Options** > **Set destination** and a landmark as the destination, or enter the latitude and longitude coordinates. Select **Stop navigation** to clear the destination set for your trip.

Retrieve position information

Press **⌘**, and select **Tools** > **Connectivity** > **GPS data** > **Position**.

In the position view, you can view the position information of your current location. An estimate of the accuracy of the location is displayed.

To save your current location as a landmark, select **Options** > **Save position**. Landmarks are saved locations with more information, and they can be used in other compatible applications and transferred between compatible devices.

Trip meter

Press **⌘**, and select **Tools** > **Connectivity** > **GPS data** > **Trip distance**.

Select **Options** > **Start** to activate trip distance calculation, and **Stop** to deactivate it. The calculated values remain on the display. Use this feature outdoors to receive a better GPS signal.

Select **Reset** to set the trip distance and time and average and maximum speeds to zero, and to start a new calculation. Select **Restart** to set the odometer and total time to zero.


The trip meter has limited accuracy, and rounding errors may occur. Accuracy can also be affected by availability and quality of GPS signals.


Web browser


To browse the web, you need to have an internet access point configured in your device.


For more information on the web browser, see the extended user guide on the product support pages of the Nokia website.

Browse the web

Press , and select **Web**.

 **Important:** Use only services that you trust and that offer adequate security and protection against harmful software.

 **Important:** Only install and use applications and other software from trusted sources, such as applications that are Symbian Signed or have passed the Java Verified™ testing.

To browse a web page, in the bookmarks view, select a bookmark, or enter the address in the field () , and press the scroll key.

Some web pages may contain material, such as graphics and sounds, that requires a large amount of memory to view. If your device runs out of

memory while loading such a page, the graphics on the page are not shown.

To browse web pages without graphics, to save memory, select **Options > Settings > Page > Load content > Text only**.

To enter a new web page address you want to visit, select **Options > Go to web address**.

To retrieve the latest content of the page from the server, select **Options > Navigation options > Reload**.

To save the web address of the current page as a bookmark, select **Options > Save as bookmark**.

To use visual history to view snapshots of the pages you have visited during the current browsing session, select **Back** (available if **History list** is set on in the browser settings and the current page is not the first page you visit). To go to a previously visited page, select the page.

To save a page while browsing, select **Options > Tools > Save page**.

You can save pages and browse them later when offline. You can also group these saved pages into

folders. To access the pages you have saved, select **Options > Bookmarks > Saved pages**.

To open a sublist of commands or actions for the page that is open, select **Options > Service options** (if supported by the web page).

To allow or prevent the automatic opening of multiple windows, select **Options > Window > Block pop-ups** or **Allow pop-ups**.

Shortcuts while browsing

- Press **1** to open your bookmarks.
- Press **2** to search for keywords in the current page.
- Press **3** to return to the previous page.
- Press **5** to list all open windows.
- Press **8** to show the page overview of the current page. Press **8** again to zoom in and view the desired section of the page.
- Press **9** to enter a new web address.
- Press **0** to go to the home page (if defined in settings).
- Press ***** and **#** to zoom in or out on the page.



Tip: To return to the standby mode with the browser open in the background, press **⌘** twice or the end key. To return to the browser, press and hold **⌘**, and select the browser from the list.

Navigate pages

Mini Map and page overview help you navigate web pages that contain a large amount of information.

When Mini Map is set on in the browser settings and you scroll through a large web page, Mini Map opens and shows an overview of the web page you browse.

To set Mini Map on, select **Options > Settings > General > Mini map > On**.

To move in Mini Map, scroll left, right, up, or down. When you find the desired location, stop scrolling. Mini Map disappears and leaves you at the selected location.

When you are browsing a web page that contains a large amount of information, you can also use **Page overview** to view what kind of information the page contains.

To show the page overview of the current page, press **8**. To find the desired spot on the page, scroll up, down, left, or right. Press **8** again to zoom in and view the desired section of the page.

Web feeds and blogs

Web feeds are xml files on web pages that are used by the weblog community and news organisations to share the latest headlines or text, for example,

news feeds. Blogs or weblogs are web diaries. Most of the web feeds use RSS and Atom technologies. It is common to find web feeds on web, blog, and wiki pages.

The Web application automatically detects if a web page contains web feeds.

To subscribe to a web feed, select **Options** > **Subscribe**.

To view the web feeds to which you have subscribed, in the bookmarks view, select **Web feeds**.

To update a web feed, select it and **Options** > **Refresh**.

To define how the web feeds are updated, select **Options** > **Settings** > **Web feeds**.

Bookmarks

The bookmarks view opens when you open the Web application. You can select web addresses from a list or from a collection of bookmarks in the **Auto. bookmarks** folder. You can also enter the URL address of the web page you want to visit directly into the field (📎).

📎 indicates the starting page defined for the default access point.

You can save URL addresses as bookmarks while browsing on the internet. You can also save addresses received in messages to your bookmarks and send saved bookmarks.

To open the bookmarks view while browsing, press **1**, or select **Options** > **Bookmarks**.

To edit the details of a bookmark, such as the title, select **Options** > **Bookmark manager** > **Edit**.

In the bookmarks view, you can also open other browser folders. The Web application allows you to save web pages during browsing. In the **Saved pages** folder, you can view the content of the pages you have saved offline.

Web also keeps track of the web pages you visit during browsing. In the **Auto. bookmarks** folder, you can view the list of visited web pages.

In **Web feeds**, you can view saved links to web feeds and blogs to which you have subscribed. Web feeds are commonly found on major news organisation web pages, personal weblogs, online communities that offer the latest headlines, and article summaries. Web feeds use RSS and Atom technologies.

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 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** > **Clear privacy data** > **Clear cache**.

End the connection

To end the connection and view the browser page offline, select **Options** > **Tools** > **Disconnect**; or to end the connection and close the browser, select **Options** > **Exit**.

To take the browser to the background, press the end key once. To end the connection, press and hold the end key.

To delete the information the network server collects about your visits to various web pages, select **Options** > **Clear privacy data** > **Delete cookies**.

Connection security

If the security indicator (🔒) 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.

Security certificates may be required for some services, such as banking services. You are notified if the identity of the server is not authentic or if you do not have the correct security certificate in your device. For more information, contact your service provider.

Web settings

Press **⚙**, and select **Web**.

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

General settings

- **Access point** — Change the default access point. Some or all access points may be preset for your device by your service provider; you may not be able to change, create, edit, or remove them.
- **Homepage** — Define the home page.
- **Mini map** — Set Mini Map on or off. See "Navigate pages," p. 56.

- **History list** — While browsing, to select **Back** to see a list of the pages you have visited during the current browsing session, set **History list** on.
- **Security warnings** — Hide or show security notifications.
- **Java/ECMA script** — Enable or disable the use of scripts.

Page settings

- **Load content** — Select whether you want to load images and other objects while browsing. If you select **Text only**, to load images or objects later during browsing, select **Options > Tools > Load images**.
- **Screen size** — Select between full screen and the normal view with the options list.
- **Default encoding** — If text characters are not shown correctly, you can select another encoding according to language for the current page.
- **Block pop-ups** — Allow or block automatic opening of different pop-ups while browsing.
- **Automatic reload** — If you want the web pages to be refreshed automatically while browsing, select **On**.
- **Font size** — Define the font size that is used for web pages.

Privacy settings

- **Auto. bookmarks** — Enable or disable automatic bookmark collecting. If you want to continue saving the addresses of the visited web

pages into the **Auto. bookmarks** folder, but hide the folder from the bookmarks view, select **Hide folder**.

- **Form data saving** — If you do not want the data you enter to different forms on a web page to be saved and used the next time you open the page, select **Off**.
- **Cookies** — Enable or disable the receiving and sending of cookies.

Web feed settings

- **Automatic updates** — Define whether you want the web feeds to be updated automatically and how often you want to update them. Setting the application to retrieve web feeds automatically may involve the transmission of large amounts of data through your service provider's network. Contact your service provider for information about data transmission charges.
- **Acc. point for auto-update** — Select the desired access point for updating. This option is only available when **Automatic updates** is on.



Connections

Your device offers several options to connect to the internet or to another compatible device or PC.

For more information on connectivity, see the extended user guide on the product support pages of the Nokia website.

Wireless LAN

Your device supports wireless local area network (WLAN). With WLAN, you can connect your device to the internet and compatible devices that have WLAN.

About WLAN

To use WLAN, it must be available in the location, and your device must be connected to the WLAN.

Some places, like France, have restrictions on the use of wireless LAN. Check with your local authorities for more information.


Features that use WLAN, or that are allowed 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 WLAN features:

- IEEE 802.11b/g standard
- Operation at 2.4 GHz
- Wired equivalent privacy (WEP) with keys up to 128 bits, Wi-Fi protected access (WPA), and 802.1x encryption methods. These functions can be used only if they are supported by the network.


WLAN connections

To use WLAN, you must create an internet access point (IAP) in a wireless LAN. Use the access point for applications that need to connect to the internet. See "WLAN internet access points," p. 61.

 **Important:** Always enable one of the available encryption methods to increase the security of your wireless LAN connection. Using encryption reduces the risk of unauthorized access to your data.

A WLAN connection is established when you create a data connection using a WLAN internet access point. The active WLAN connection ends when you end the data connection.

You can use WLAN during a voice call or when packet data is active. You can only be connected to one WLAN access point device at a time, but several applications can use the same internet access point. When the device is in the offline profile, you can still use WLAN (if available). Remember to comply with any applicable safety requirements when establishing and using a WLAN connection.

 **Tip:** To check the unique media access control (MAC) address that identifies your device, enter ***#62209526#** in the standby mode.

WLAN wizard

The WLAN wizard helps you to connect to a WLAN and manage your WLAN connections.

The WLAN wizard shows the status of your WLAN connections in the active standby mode. To view the available options, scroll to the row showing the status, and select it.

If the search finds WLANs, for example, **WLAN network found** is displayed, to create an internet access point (IAP) and start the web browser using this IAP, select the status and **Start Web browsing**.

If you select a secured WLAN network, you are asked to enter the relevant passcodes. To connect to a hidden network, you must enter the correct

network name (service set identifier, SSID). To create a new access point for a hidden WLAN, select **New WLAN**.

If you are connected to a WLAN, the IAP name is displayed. To start the web browser using this IAP, select the status and **Continue Web browsing**. To end the connection in the WLAN, select the status and **Disconnect WLAN**.

If WLAN scanning is off and you are not connected to any WLAN, **WLAN scanning off** is displayed. To set scanning on and search for available WLANs, select the status and press the scroll key.

To start a search for available WLANs, select the status and **Search for WLAN**. To set WLAN scanning off, select the status and select **WLAN scanning off**.

To access the WLAN wizard application in the menu, press **⌘**, and select **Tools > WLAN wiz.**

WLAN internet access points

Press **⌘**, and select **Tools > WLAN wiz.**

Select **Options** and from the following:

- **Filter WLAN networks** — Filter out WLANs in the list of found networks. The selected networks are filtered out the next time the application searches for WLANs.

- **Details** — View the details of a network shown in the list. If you select an active connection, the connection details are displayed.
- **Define access point** — Create an internet access point (IAP) in a WLAN.
- **Edit access point** — Edit the details of an existing IAP.




You can also use connection manager to create internet access points. See "Active data connections," p. 62.


Connection manager

Active data connections

Press , and select **Tools > Connectivity > Conn. mgr. > Active data connections**.

In the active data connections view, you can see the open data connections:

-  data calls
-  packet data connections
-  WLAN connections



 **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.

Available WLAN networks

Press , and select **Tools > Connectivity > Conn. mgr. > Available WLAN networks**.

The available WLAN view shows a list of WLANs within range, their network mode (infrastructure or ad hoc), and signal strength indicator.  is shown for networks with encryption, and  if your device has an active connection in the network.

To view the details of a network, select **Options > Details**.

To create an internet access point in a network, select **Options > Define access point**.

Bluetooth connectivity

About Bluetooth connectivity

You can make a wireless connection to other compatible devices with Bluetooth connectivity. 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; make a wireless connection to your compatible PC (for example, to transfer files); and connect to a compatible printer to print images with Image print.

Since devices with Bluetooth wireless technology communicate using radio waves, they do not need to be in direct line-of-sight. However, they must be within 10 metres (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 2.0 supporting the following profiles: Advanced Audio Distribution Profile, Audio/Video Remote Control Profile, Basic Imaging Profile, Basic Printing Profile, Dial-up Networking Profile, File Transfer Profile, Hands-Free Profile, Headset Profile, Human Interface Device Profile, Object Push Profile, SIM Access Profile, and Synchronization 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.

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 "Phone and SIM," p. 101.

Settings

Press , and select **Tools > Bluetooth**.

When you open the application for the first time, you are asked to define a name for your device. You can change the name later on.

Select from the following:

- **Bluetooth** — To make a wireless connection to another compatible device, first set Bluetooth connectivity **On**, then establish a connection. To switch off Bluetooth connectivity, select **Off**.
- **My phone's visibility** — To allow your device to be found by other devices with Bluetooth wireless technology, select **Shown to all**. To set a time after which the visibility is set from shown to hidden, select **Define period**. To hide your device from other devices, select **Hidden**.
- **My phone's name** — Edit the name shown to other devices with Bluetooth wireless technology.
- **Remote SIM mode** — To enable another device, such as a compatible car kit enhancement, to use

the SIM card in your device to connect to the network, select **On**.

Security tips

Press , and select **Tools > Bluetooth**.

When you are not using Bluetooth connectivity, to control who can find your device and connect to it, select **Bluetooth > Off** or **My phone's visibility > Hidden**.





Do not pair with or accept connection requests from an unknown device. This protects your device from harmful content.

Send data using Bluetooth connectivity

Several Bluetooth connections can be active at a time. For example, if you are connected to a compatible headset, you can also transfer files to another compatible device at the same time.

1. Open the application 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**.


Devices with Bluetooth wireless technology that are within range are displayed. Device icons are as follows:

-  computer
-  phone
-  audio or video device
-  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. 64.

When the connection is established, **Sending data** is displayed.

 **Tip:** When searching for devices, some devices may show only the unique address (device address). To find the unique address of your device, enter ***#2820#** in the standby mode.


Pair devices

To pair with compatible devices and view your paired devices, in the main view of Bluetooth connectivity, scroll right.


Before pairing, create your own passcode (1 to 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.

1. To pair with a device, select **Options > New paired device**. Devices that are within range are displayed.
2. Select the device, and enter the passcode. The same passcode must be entered on the other device as well.
3. Some audio enhancements connect automatically to your device after pairing. Otherwise, scroll to the enhancement, and select **Options > Connect to audio device**.

Paired devices are indicated by  in the device search.


To set a device as authorised or unauthorised, scroll to the device, and select from the following options:

- **Set as authorised** — Connections between your device and the authorised device can be made without your knowledge. No separate acceptance or authorisation is needed. Use this status for your own devices, such as your compatible headset or PC or devices that belong to someone you trust.  indicates authorised 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**.

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,  is displayed, and the item is placed in the **Inbox** folder in Messaging. Messages received through Bluetooth connectivity are indicated by



USB

Press , and select **Tools > Connectivity > USB**.

To have the device ask the purpose of the connection each time a compatible data cable is connected, select **Ask on connection > Yes**.

If **Ask on connection** is set to off or you want to change the mode during an active connection, select **USB mode** and from the following:

- **PC Suite** — Use Nokia PC applications such as Nokia Nseries PC suite, Nokia Lifeblog, and Nokia Software Updater.
- **Data transfer** — Transfer data between your device and a compatible PC. Use this mode also for downloading maps with the Nokia Map Loader PC application.
- **Image print** — Print images on a compatible printer.
- **Media player** — Synchronise music with Windows Media Player.

PC connections

You can use your device with a variety of compatible PC connectivity and data communications applications. With Nokia Nseries PC Suite you can, for example, transfer images between your device and a compatible PC.

Always create the connection from the PC to synchronise with your device.

Nokia Video Centre

With Nokia Video Centre (network service), you can download and stream video clips over the air from compatible internet video services using packet data or WLAN. You can also transfer video clips from a compatible PC to your device and view them in Video Centre.

Video Centre supports the same file formats as RealPlayer. All videos are played in the landscape mode by default.

Your device may have predefined services.

Service providers may provide free content or charge a fee. Check the pricing in the service or from the service provider.

Find and view videos

1. Press **⌘**, and select **Video centre**.
2. To connect to a service, scroll left or right, and select the desired video service.



The device updates and displays the content available in the service.

3. To view videos by categories (if available), scroll left or right to view the other tabs.
4. To view information about a video, select **Options > Video details**.
5. Some video clips can be streamed over the air, but others must be first downloaded to your device. To download a video clip, select **Options > Download**.

To stream a video clip or view a downloaded clip, select **Options > Play**.

6. When the clip is playing, use the scroll key and the selection keys to control the player. To adjust the volume, press the volume key.

Downloads continue in the background if you exit the application. The downloaded videos are saved in **Video centre > My videos**.

To connect to the internet to browse available services that you can add to the main view, select **Add new services**.

Internet videos

Internet videos are video clips distributed in the internet using RSS-based feeds. You can add new feeds to **Internet videos** in the settings.

You can view your feeds in the **Internet videos** folder in Video Centre.

To add or delete feeds, select **Options > Feed subscriptions**.

To view the videos available in a feed, scroll to it, and press the scroll key.

To view information about a video, select **Options > Video details**.

To download a video, scroll to it, and select **Options > Download**.

To play the downloaded video, press the scroll key.

Play downloaded videos


The downloaded videos are saved in **Video centre > My videos**.

To play a downloaded video, press the scroll key.

To play a downloaded video in the home network, select **Options > Show via home network**. Home network must be configured first. See "About home network," p. 41.

When the clip is playing, use the scroll key and the selection keys to control the player.

If there is not enough free space in the device memory and compatible memory card, the application automatically deletes some of the oldest videos when new videos are downloaded.

 indicates videos that may soon be deleted.

To prevent a video from being automatically deleted () , select **Options > Protect**.

Transfer videos from your PC

Transfer your own videos to Video Centre from compatible devices using a compatible USB data cable.

To transfer videos from a compatible PC to the memory card in your device, do the following:

1. To view your device on a PC as a mass memory device (**E:**) where you can transfer any data files, make the connection with a compatible USB data cable.
2. Select **Data transfer** as the connection mode. A compatible memory card needs to be inserted in the device.
3. Select the videos you want to copy from your PC.
4. Transfer the videos to **E:\My Videos** in the memory card.

The transferred videos appear in the **My videos** folder in Video Centre. Video files in other folders of your device are not displayed.

Settings

In the Video Centre main view, select **Options** > **Settings** and from the following:

- **Video service selection** — Select the video services you want to appear in the main view of the application. You can also view the details of a video service.
Some services require a user name and a password that you receive from the service provider.
- **Default access points** — Select the access points used for the data connection. Using packet data access points to download files may involve


the transmission of large amounts of data through your service provider's network. Contact your service provider for information about data transmission charges.

- **Parental control** — Activate the parental lock for video services.
- **Preferred memory** — Select whether downloaded videos are saved in the device memory or on a compatible memory card. If the selected memory becomes full, the device saves the content in the other memory, if available. If there is not enough space in the other memory, the application automatically deletes some of the oldest videos.
- **Thumbnails** — Select whether to view thumbnail images in video lists.

Music folder

For information on radio and Nokia Podcasting, see the extended user guide on the product support pages of the Nokia website.

Music player

 **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.

Music player supports file formats such as AAC, AAC+, eAAC+, MP3, and WMA. Music player does not necessarily support all features of a file format or all the variations of file formats.


You can also use Music player to listen to podcast episodes. Podcasting is the method for delivering audio or video content over the internet using either RSS or Atom technologies for playback on mobile devices and PCs.

You can transfer music from other compatible devices to your device. See "Transfer music to your device," p. 72.

Play a song or a podcast episode

You may have to refresh the music and podcast libraries after you have updated the song or podcast selection in your device. To add all available items to the library, in the Music player main view, select **Options > Refresh**.

To play a song or a podcast episode, do the following:

1. Press , and select **Music > Music player**.
2. Select **Music or Podcasts**.
3. Select categories to navigate to the song or podcast episode you want to hear.
4. To play the selected files, press the scroll key.

To pause playback, press the scroll key; to resume, press the scroll key again. To stop playback, scroll down.

To fast forward or rewind, press and hold the scroll key to the right or left.

To go to the next item, scroll right. To return to the beginning of the item, scroll left. To skip to the previous item, scroll left again within 2 seconds after a song or podcast has started.



To switch random play (⌘) on or off, select **Options > Shuffle**.

To repeat the current item (⌘), all items (⌘), or to switch repeat off, select **Options > Repeat**.

If you play podcasts, shuffle and repeat are automatically switched off.

To adjust the volume, press the volume key.

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

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

To view a visualisation during playback, select **Options > Show visualisation**.

To return to the standby mode and leave the player playing in the background, press the end key, or to switch to another open application, press and hold ⌘.

To close the player, select **Options > Exit**.

Music menu

Press ⌘, and select **Music > Music player > Music**.

The music menu shows the available music. Select the desired option in the music menu to view all songs, sorted songs, or playlists.

When the Music player is playing in the background, to open the Now playing view in the multimedia menu, press the multimedia key.

Playlists

Press ⌘, and select **Music > Music player > Music**.

To view and manage playlists, in the music menu, select **Playlists**.

To view details of the playlist, select **Options > Playlist details**.

Create a playlist

1. Select **Options > Create playlist**.
2. Enter a name for the playlist, and select **OK**.



3. To add songs now, select **Yes**; or to add the songs later, select **No**.
4. If you select **Yes**, select artists to find the songs you want to include in the playlist. Press the scroll key to add items.
To show the song list under an artist title, scroll right. To hide the song list, scroll left.
5. When you have made your selections, select **Done**.
If a compatible memory card is inserted, the playlist is saved to the memory card.

To add more songs later, when viewing the playlist, select **Options** > **Add songs**.

To add songs, albums, artists, genres, and composers to a playlist from the different views of the music menu, select an item and **Options** > **Add to a playlist** > **Saved playlist** or **New playlist**.

To remove a song from a playlist, select **Options** > **Remove**. This does not delete the song from the device; it only removes it from the playlist.

To reorder songs in a playlist, scroll to the song you want to move, and select **Options** > **Reorder list**. To grab songs and drop them to a new position, use the scroll key.

Podcasts

Press **⌘**, and select **Music** > **Music player** > **Podcasts**.

The podcast menu displays the podcasts available in the device.

Podcast episodes have three states: never played, partially played, and completely played. If an episode is partially played, it plays from the last playback position the next time it is played. If an episode is never played or completely played, it plays from the beginning.

Transfer music to your device

You can transfer music from a compatible PC or other compatible devices using a compatible USB data cable or Bluetooth connectivity.

PC requirements for music transfer:

- Microsoft Windows XP operating system (or later)
- A compatible version of the Windows Media Player application. You can get more detailed information about Windows Media Player compatibility from your device's product pages on the Nokia website.
- Nokia Nseries PC Suite 1.6 or later

Windows Media Player 10 may cause playback delays to WMDRM technology protected files after

they have been transferred to your device. Check Microsoft support website for a hotfix to Windows Media Player 10 or get a newer compatible version of Windows Media Player.

Transfer music from PC

You can use three different methods to transfer music:

- To view your device on a PC as a mass memory device where you can transfer any data files, make the connection with a compatible USB data cable or Bluetooth connectivity. If you are using the USB cable, select **Data transfer** as the connection mode. A compatible memory card needs to be inserted in the device.
- To synchronise music with Windows Media Player, connect the compatible USB data cable and select **Media player** as the connection mode. A compatible memory card needs to be inserted in the device.
- To use Nokia Music Manager in Nokia Nseries PC Suite, connect the compatible USB data cable and select **PC Suite** as the connection mode.

Use **Data transfer** and **Media player** modes to transfer files to a compatible memory card.

To change the default USB connection mode, press , and select **Tools > Connectivity > USB > USB mode**.

Both Windows Media Player and Nokia Music Manager in Nokia Nseries PC Suite have been optimised to transfer music files. For information about transferring music with Nokia Music Manager, see the help function on Nokia Nseries PC Suite or visit the Nokia support pages.

Transfer with Windows Media Player

Music synchronisation functions may vary between different versions of the Windows Media Player application. For more information, see the corresponding Windows Media Player guides and help.

Manual synchronisation

With manual synchronisation, you can select the songs and playlists that you want to move, copy, or remove.

1. After your device is connected with Windows Media Player, select your device in the navigation pane on the right, if more than one device is connected.
2. In the left navigation pane, browse the music files on your PC which you want to synchronise.
3. Drag and drop songs to the **Sync List** on the right.

You can see the amount of available memory in your device above the **Sync List**.



4. To remove songs or albums, select an item in the **Sync List**, right-click, and select **Remove from list**.
5. To start the synchronisation, click **Start Sync**.

Automatic synchronisation

1. To activate the automatic synchronisation function in Windows Media Player, click the **Sync** tab, select **Nokia Handset > Set Up Sync...**, and check the **Sync this device automatically** check box.
2. Select the playlists you want to synchronise automatically in the **Available playlists** pane, and click **Add**.
The selected items are transferred to the **Playlists to sync** pane.
3. To finalise the setup for automatic synchronisation, click **Finish**.

When the **Sync this device automatically** check box is checked and you connect your device to the PC, the music library in your device is automatically updated based on the playlists you select for synchronisation in Windows Media Player. If no playlists have been selected, the whole PC music library is selected for synchronisation. If there is not enough free memory in your device, Windows Media Player selects manual synchronisation automatically.

To stop automatic synchronisation, click the **Sync** tab, and select **Stop Sync to 'Nokia Handset'**.

Nokia Music Store

In the Nokia Music Store (network service) you can search, browse, and purchase music to download to your device. To purchase music, you first need to register for the service.

To check the Nokia Music Store availability in your country, visit www.nokia.com/music.

To access the Nokia Music Store, you must have a valid internet access point in the device.

To open Nokia Music Store, press , and select **Music > Music store**.

To find more music in different categories of the music menu, select **Options > Find in Music store**.

For more information, see the extended user guide on the product support pages of the Nokia website.

Media folder

For information on Flash Player, Nokia Lifeblog, and Recorder, see the extended user guide on the product support pages of the Nokia website.

RealPlayer

With RealPlayer, you can play video clips or stream media files over the air without saving them to the device first.

RealPlayer supports files with extensions such as .3gp, .mp4, or .rm. However, RealPlayer does not necessarily support all file formats or all the variations of file formats.

For more information on RealPlayer, see the extended user guide on the product support pages of the Nokia website.

Play video clips

Press **⌘**, and select **Applications > Media > RealPlayer**.

1. To play a saved media file, select **Options > Open** and from the following:
 - **Most recent clips** — Play one of the last six files played in RealPlayer.

- **Saved clip** — Play a file saved in Gallery.
2. Scroll to a file, and press the scroll key to play the file.

To adjust the volume, use the volume key.

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.

In RealPlayer, you can only open an `rtsp://` URL address. However, RealPlayer plays a .ram file if you open an http link to it in a browser.

To stream content over the air (network service), 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.



Activation keys

To view digital rights activation keys, press **⌘**, and select **Applications > Media > Actv. keys**.

Digital rights management

Content owners may use different types of digital rights management (DRM) technologies 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 DRM 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.

Digital rights management (DRM) protected content comes with an associated activation key that defines your rights to use the content.

If your device has OMA DRM protected content, to back up both the activation keys and the content, 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.

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.

Some activation keys may be connected to a specific SIM card, and the protected content can be accessed only if the SIM card is inserted in the device.

In the main view, select from the following:

- **Valid keys** — View keys that are connected to media files or whose validity period has not begun.
- **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 for a media file, select an invalid activation key and **Options > Get new key** (web service messages must be enabled).

Personalise your device

You can personalise your device by changing the standby mode, main menu, tones, themes, or font size. Most of the personalisation options, such as changing the font size, can be accessed through the device settings. See "Personalisation settings," p. 99.

For information on 3-D tones, see the extended user guide on the product support pages of the Nokia website.

Themes


Press **⌘**, and select **Tools > Settings > General > Personalisation > Themes**.

You can change the look of the display, such as the wallpaper and icons.

To change the theme that is used for all the applications in your device, select **General**.

To preview a theme before activating it, select **Options > Preview**. To activate the theme, select **Options > Set**. The active theme is indicated by ✓.

To change the layout of the main menu, select **Menu view**.

 **Important:** Use only services that you trust and that offer adequate security and protection against harmful software.


To edit the wallpaper and power saver of the current theme that appear in the standby mode, select **Wallpaper** to change the background image or **Power saver** to change the power saver.

Profiles—set tones

Press **⌘**, and select **Tools > Profiles**.

You can set and customise the ringing tones, message alert tones, and other tones for different events, environments, or caller groups.

To change the profile, select a profile, and **Options > Activate**. To also change the profile, press the power key in the standby mode. Scroll to the profile you want to activate, and select **OK**.

 **Tip:** To switch between the general and silent profiles in the standby mode, press and hold #.



To modify a profile, scroll to the profile, and select **Options > Personalise**.

If you want the caller's name to be spoken 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**.

Modify the standby mode

To switch the active standby on or off, press **⌘**, and select **Tools > Settings > General > Personalisation > Standby mode > Active standby**. The active standby display shows application shortcuts, and events from applications such as calendar and player.

To change the selection key shortcuts or the default shortcut icons in the active standby mode, select **Tools > Settings > General > Personalisation > Standby mode**. Some



shortcuts may be fixed, and you cannot change them.

To change the clock shown in the standby mode, press **⌘**, and select **Applications > Clock > Options > Settings > Clock type**.

You can also change the standby mode background image or what is shown in the power saver. See "Themes," p. 77.

Modify the main menu

To change the main menu view, in the main menu, select **Options > Change Menu view > Grid or List**.

To rearrange the main menu, in the main menu, select **Options > Move, Move to folder, or New folder**. You can move less used applications into folders and place applications that you use more often into the main menu.

To use animated icons in your device, in the main menu, select **Options > Icon animation > On**.

Messaging

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



For more information on messaging, see the extended user guide on the product support pages of the Nokia website.


Messaging main view


Press , and select **Messaging** (network service).

To create a new message, select **New message**.





Messaging contains the following folders:

-  **Inbox** — Received messages, except e-mail and cell broadcast messages, are stored here.
-  **My folders** — Organise your messages into folders.


 **Tip:** To avoid rewriting messages that you send often, use texts in the **Templates** folder in **My folders**. You can also create and save your own templates.

-  **Mailbox** — Connect to your remote mailbox to retrieve your new e-mail messages, or view

your previously retrieved e-mail messages offline.

-  **Drafts** — Draft messages that have not been sent are stored here.
-  **Sent** — The last messages that have been sent, excluding messages sent using Bluetooth connectivity, are stored here. You can change the number of messages to save in this folder.
-  **Outbox** — Messages waiting to be sent are temporarily stored in the outbox, for example, when your device is outside network coverage.
-  **Reports** — You can request the network to send you a delivery report of the text messages and multimedia messages you have sent (network service).

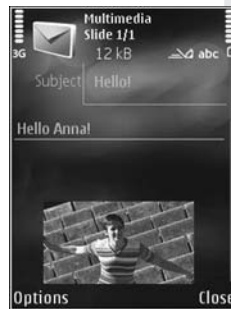
Write and send messages


Press , and select **Messaging**.


Before you can create a multimedia message or write an e-mail, you must have the correct connection settings in place. See "Define the e-mail settings," p. 82.

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** > **Text message** to send a text message, **Multimedia message** to send a multimedia message (MMS), **Audio message** to send an audio message (a multimedia message that includes one sound clip), or **E-mail** to send an e-mail.
2. In the To field, press the scroll key to select recipients or groups from contacts, or enter the recipient's phone number or e-mail address. To add a semicolon (;) that separates the recipients, press *. You can also copy and paste the number or address from the clipboard.
3. In the Subject field, enter the subject of the multimedia message or e-mail. To change the fields that are visible, select **Options** > **Address fields**.



4. In the message field, write the message. To insert 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**.
6. 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**, **Note**, or **Other** for other file types. E-mail attachments are indicated by .
8. To send the message, select **Options** > **Send**, or press the call key.

 **Note:** Your device may indicate that your message was sent to the message center number programmed into your device. Your device may not indicate whether the message is received at the intended destination. For more details about messaging services, contact your service provider. Your device supports the sending of text messages beyond the character limit for a single message.





Longer messages are 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, take up more space, limiting the number of characters that can be sent in a single message.


You may not be able to send video clips that are saved in the .mp4 format or that exceed the size limit of the wireless network in a multimedia message.

Messaging inbox


Receive messages

Press **g**, and select **Messaging > Inbox**.




In the **Inbox** folder,  indicates an unread text message,  an unread multimedia message,  an unread audio message, and  data received through Bluetooth connectivity.

When you receive a message,  and **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 scroll key. To reply to a received message, select **Options > Reply**.


Multimedia messages

 **Important:** Exercise 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 centre. To start a packet data connection to retrieve the message to your device, select **Options > Retrieve**.

When you open a multimedia message () , you may see an image and a message.  is shown if sound is included, or  if video is included. To play the sound or the video, select the indicator.

To see the media objects that have been included in the multimedia message, select **Options > Objects**.

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

Mailbox

Define the e-mail settings

 **Tip:** Use Settings wizard to define your mailbox settings. Press , and select **Tools > Utilities > Sett. wizard**.

To use e-mail, you must have a valid internet access point (IAP) in the device and define your e-mail settings correctly. See "Access points," p. 105. See "E-mail settings," p. 85.

You must have a separate e-mail account. Follow the instructions given by your remote mailbox and internet service provider (ISP).

If you select **Mailbox** in the Messaging 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**.

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

Press , and select **Messaging** and a 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.


To view previously retrieved e-mail messages offline, select **No**.

To create a new e-mail message, select **New message > E-mail** in the Messaging main view or **Options > Create message > E-mail** in your mailbox. See "Write and send messages," p. 79.

Retrieve e-mail messages

Press , and select **Messaging** and a mailbox.


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

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

1. When you have an open connection to a remote mailbox, select **Options > Retrieve e-mail > New** to retrieve all new messages, **Selected** to retrieve only the messages that have been marked, or **All** to retrieve all messages from the mailbox.

To stop retrieving messages, select **Cancel**.

2. To close the connection and view the e-mail messages offline, select **Options** > **Disconnect**.
3. To open an e-mail message, press the scroll key. 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 the message, and select the attachment field indicated by . If the attachment has a dimmed indicator, it has not been retrieved to the device; select **Options** > **Retrieve**.

To retrieve e-mail messages automatically, select **Options** > **E-mail settings** > **Automatic retrieval**. See "Automatic retrieval settings," p. 87.

Setting the device to retrieve e-mail automatically may involve the transmission of large amounts of data through your service provider's network. Contact your service provider for information about data transmission charges.

Delete e-mail messages


Press , and select **Messaging** and a mailbox.

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 message 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** > **Phone and server**.

To cancel deleting an e-mail from the device and server, scroll to an e-mail that has been marked to be deleted during the next connection , and select **Options** > **Restore**.

Disconnect from the mailbox

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

Messaging settings

The settings may be preconfigured in your device, or you may receive them in a message. To enter settings manually, fill in all fields marked with **Must be defined** or an asterisk.

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

Text message settings

Press **⌘**, and select **Messaging > Options > Settings > Text message**.

Select from the following:

- **Message centres** — View a list of all text message centres that have been defined.
- **Message centre in use** — Select which message centre to use to deliver text messages.
- **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 centre resends your message if the first attempt fails (network service). If the message cannot be sent within the validity period, the message is deleted from the message centre.
- **Message sent as** — Contact your service provider to learn if your message centre is able to convert text messages into these other formats.

- **Preferred connection** — Select the connection to use.
- **Reply via same centre** — Select whether you want the reply message to be sent using the same text message centre number (network service).

Multimedia message settings

Press **⌘**, and select **Messaging > Options > Settings > Multimedia message**.

Select from the following:

- **Image size** — Define the size of the image in a multimedia message.
- **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. If you select **Restricted**, the device prevents you from sending messages that may not be supported. To include content in your messages without notifications, select **Free**.
- **Access point in use** — Select which access point is used as the preferred connection.
- **Multimedia retrieval** — Select how you want to receive messages. To receive messages automatically in your home cellular network, select **Auto in home netw..** Outside your home cellular network, you receive a notification that there is a message to retrieve in the multimedia message centre.



Outside your home cellular 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 cellular 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).
- **Deny report sending** — Select whether you want to deny your device sending delivery reports of received messages.
- **Message validity** — Select how long the message centre resends your message if the first attempt fails (network service). If the message cannot be sent within the validity period, the message is deleted from the message centre.

E-mail settings

Manage mailboxes

Press **⌘**, and select **Messaging** > **Options** > **Settings** > **E-mail**.

To select which mailbox you want to use to send e-mail, select **Mailbox in use** and a mailbox.

To remove a mailbox and its messages from your device, select **Mailboxes**, scroll to the desired mailbox, and press **C**.

To create a new mailbox, in **Mailboxes**, select **Options** > **New mailbox**. The name you give to the new mailbox replaces **Mailbox** in the Messaging main view. You can have up to six mailboxes.

Select **Mailboxes** and a mailbox to change the connection settings, user settings, retrieval settings, and automatic retrieval settings.

Connection settings

Press **⌘**, and select **Messaging** > **Options** > **Settings** > **E-mail** > **Mailboxes**, a mailbox, and **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 server** — 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 "Access points," p. 105.
- **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 cannot be changed.
- **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.
- **Outgoing mail server** — 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 service provider. Contact your service provider for more information.

The settings for **User name**, **Password**, **Access point in use**, **Security (ports)**, and **Port** are similar to the ones in **Incoming e-mail**.

User settings

Press , and select **Messaging > Options > Settings > E-mail > Mailboxes**, a mailbox, and **User settings**.

Select from the following:

- **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 send a copy of the e-mail to your own mailbox.
- **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, a note, and a mail indicator) when new mail is received.

Retrieval settings

Press , and select **Messaging > Options > Settings > E-mail > Mailboxes**, a mailbox, and **Retrieval settings**.

Select from the following:



- **E-mail to retrieve** — Define which parts of the e-mail are retrieved: **Headers only**, **Size limit** (POP3), or **Msgs. & attachs.** (POP3).
- **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 settings

Press **⌘**, and select **Messaging > Options > Settings > E-mail > Mailboxes**, a mailbox, and **Automatic retrieval**.

Select from the following:

- **E-mail notifications** — To automatically retrieve the headings to your device when you receive new e-mail in your remote mailbox, select **Auto-update** or **Only in home netw..**
- **E-mail retrieval** — To automatically retrieve the headings of new e-mail messages from your remote mailbox at defined times, select **Enabled** or **Only in home netw..** Define when and how often the messages are retrieved.

E-mail notifications and **E-mail retrieval** cannot be active at the same time.

Setting the device to retrieve e-mail automatically may involve the transmission of large amounts of

data through your service provider's network. Contact your service provider for information about data transmission charges.

Other settings

Press **⌘**, and select **Messaging > Options > Settings > Other**.

Select 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.
- **Number of saved msgs.** — Define how many sent messages are saved to the sent folder at a time. When the limit is reached, the oldest message is deleted.
- **Memory in use** — Select the memory where you want to save your messages.



Make calls

For information on conference calls, speed dialling, voice dialling, call waiting, and options during calls, see the extended user guide on the product support pages of the Nokia website. Video sharing is also explained in the extended user guide.

Voice calls

1. In the standby mode, enter the phone number, including the area code. To remove a number, press **C**.

For international calls, press * twice for the + character (replaces the international access code), and enter the country code, area code (omit the leading zero if necessary), and phone number.

2. Press the call key to call the number.
3. Press the end key to end the call (or to cancel the call attempt).

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

To make a call from Contacts, press **Ⓜ**, and select **Contacts**. Scroll to the desired name, or enter the first letters of the name to the search field. Matching

contacts are listed. To call, press the call key. If you have saved several numbers for a contact, select the desired number from the list.

Voice and video mailboxes

To call your voice or video mailbox (network services, video mailbox available only in the UMTS network), press and hold **1** in the standby mode, and select **Voice mailbox** or **Video mailbox**.

To change the phone number of your voice or video mailbox, press **Ⓜ**, and select **Tools > Utilities > Call mailbox**, a mailbox, and **Options > Change number**. Enter the number (obtained from your network service provider), and select **OK**.

Answer or decline a call

To answer the call, press the call key.

To mute the ringing tone of an incoming call, select **Silence**.

If you do not want to answer a call, press the end key. If you activate the **Call divert > Voice calls >**

If **busy** function in phone settings to forward calls, declining an incoming call also forwards the call.

When you select **Silence** to mute the ringing tone of an incoming call, you can send a text message without rejecting the call, informing the caller that you cannot answer the call. Select **Options** > **Send text message**. To set up this option and write a standard text message, select **Tools** > **Settings** > **Phone** > **Call** > **Reject call with SMS**.


Make a video call


When you make a video call (network service), you can see a real-time, two-way video between you and the recipient of the call. The live video image, or video image captured by the camera in your device is shown to the video call recipient.

To be able to make a video call, you must have a USIM card and be in the coverage of a UMTS network. For availability of and subscription to video call services, contact your network service provider.

A video call can only be made between two parties. The video call can be made to a compatible mobile device or an ISDN client. Video calls cannot be made while another voice, video, or data call is active.

Icons


 You are not receiving video (the recipient is not sending video or the network is not transmitting it).

 You have denied video sending from your device. To send a still image instead, select **Tools** > **Settings** > **Phone** > **Call** > **Image in video call**.

Even if you denied video sending during a video call, the call is still charged as a video call. Check the pricing with your service provider.

1. To start a video call, enter the phone number in the standby mode, or select **Contacts** and a contact.
2. Select **Options** > **Call** > **Video call**.

The secondary camera on the front is used by default for video calls. Starting a video call may take a while. **Waiting for video image** is shown. If the call is not successful (for example, video calls are not supported by the network, or the receiving device is not compatible), you are asked if you want to try a normal call or send a text or multimedia message instead.

The video call is active when you see two video images, and hear the sound through the loudspeaker. The call recipient may deny video sending () , in which case you only hear the sound and may see a still image or a grey background graphic.

3. To end the video call, press the end key.

Answer or decline a video call

When a video call arrives,  is displayed.

To answer the video call, press the call key. **Allow video image to be sent to caller?** is displayed. To start sending live video image, select **Yes**.

If you do not activate the video call, video sending is not activated, and you only hear the sound of the caller. A grey screen replaces the video image. To replace the grey screen with a still image captured by the camera in your device, select **Tools > Settings > Phone > Call > Image in video call**.

To end the video call, press the end key.

Internet calls


With the internet call service (network service), you can make and receive calls over the internet. Internet calls can be established between computers, between mobile phones, and between a VoIP device and a traditional telephone. To make or receive an internet call, your device must be connected to an internet call service.

To connect to an internet call service, your device must be in the coverage of a connection network, such as a WLAN access point.

Your device supports voice calls over the internet (net calls). Your device attempts emergency calls primarily over cellular networks. If an emergency call using cellular networks is not successful, your device attempts an emergency call through your net call provider. Due to the established nature of cellular telephony, you should use cellular networks for emergency calls, if possible. If you have cellular network coverage available, make sure that your cellular phone is switched on and ready to make calls before you attempt an emergency call. The capability for an emergency call using internet telephony depends on the availability of a WLAN network and your net call provider's implementation of emergency call capabilities. Contact your net call provider to check the internet telephony emergency call capability.


Create an internet call profile

Before you can make internet calls, you must create an internet call profile.

1. Press , select **Tools > Settings > Connection > SIP settings > Options > New SIP profile**, and enter the required information. Ensure that **Registration** is set to **Always on**.

Contact your internet call provider for the correct settings.


2. Select **Proxy server** > **Transport type** > **Auto**.
3. Select **Back** until you return to the main view of connection settings.
4. Select **Internet tel.** > **Options** > **New profile**. Enter a name for the profile, and select the SIP profile you just created.

To use the created profile for connecting to the internet call service automatically, press , and select **Tools** > **Connectivity** > **Internet tel.** > **Preferred profile**.

To log in to the internet call service manually, select **Registration** > **When needed**, and **Transport type** > **UDP** or **TCP** in the SIP settings when creating an internet call profile.

Connect to the internet call service

To make or receive an internet call, your device must be connected to an internet call service. If you have selected automatic login, your device automatically connects to the internet call service. If you log in to the service manually, select an available network from the list and **Select**.

When you are connected to an internet call service,  is shown in the standby mode.

The list of networks is refreshed automatically every 15 seconds. To refresh the list manually, select **Options** > **Refresh**. Use this option if your WLAN access point is not shown.

To select an internet call service for outgoing calls if the device is connected to more than one service, select **Options** > **Change service**.

To configure new services, select **Options** > **Configure service**. This option is shown only if there are services that have not been configured.

To save the network to which you are currently connected, select **Options** > **Save network**. The saved networks are marked with a star in the list of networks.

To connect to an internet call service using a hidden WLAN, select **Options** > **Use hidden network**.

To end the connection to an internet call service, select **Options** > **Disconnect from serv..**

Make internet calls

When you have activated the internet call feature, you can make an internet call from all applications where you can make a regular voice call. For example, in **Contacts**, scroll to the desired contact, and select **Call** > **Options** > **Internet call**.

To make an internet call in the standby mode, enter the phone number or internet address, and press the call key.

To make an internet call to an address that does not start with a digit, press any number key when the device is in the standby mode, then press # for a few seconds to clear the display and to switch the device from the number mode to the letter mode. Enter the address, and press the call key.

To make an internet call from Contacts, press **Ⓜ**, select **Contacts**, scroll to the desired contact, and select **Options > Internet call**.

To make an internet call from the log, press **Ⓜ**, select **Tools > Log** and the log type, scroll to the desired contact, and select **Options > Internet call**.

Log

The log stores information about the communication history of the device. 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.

For more information on Log, see the extended user guide on the product support pages of the Nokia website.

Recent calls

Press **Ⓜ**, and select **Tools > Log**.


To monitor the phone numbers of missed, received, and dialled voice calls, select **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.

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 **C**.

Call duration

Press **Ⓜ**, and select **Tools > Log**.

To monitor the approximate duration of your incoming and outgoing calls, select **Call duration**.

 **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.

Contacts (phonebook)

In Contacts, you can save and update contact information, such as phone numbers, home addresses, or e-mail addresses of your 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.

For more information on Contacts and SIM contacts, see the extended user guide on the product support pages of the Nokia website.

Save and edit names and numbers

1. Press **Ⓜ**, and select **Contacts > Options > New contact**.
2. Fill in the fields that you want, and select **Done**.

To edit contact cards, scroll to the contact card you want to edit, and select **Options > Edit**. You can also search for the desired contact by entering the first letters of the name to the search field. A list of the contacts starting with the letters appear on the display.



Tip: To add and edit contact cards, you can also use Nokia Contacts Editor available in Nokia Nseries PC Suite.

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.

Add ringing tones for contacts

Press **Ⓜ**, and select **Contacts**.

To define a ringing tone for a contact or a contact group, do the following:

1. Press the scroll key 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 members of the selected group.

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).

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

Copy contacts

To copy names and numbers from a SIM card to your device, press **⌘**, and select **Contacts > Options > SIM contacts > SIM directory**, the names you want to copy, and **Options > Copy to Contacts**.

To copy contacts to your SIM card, in Contacts, select the names you want to copy and **Options > Copy to SIM directory**, or **Options > Copy > To SIM directory**. Only the contact card fields supported by your SIM card are copied.


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Applications folder

Calculator

Press , and select **Applications > Calculator**.

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

To make a calculation, enter the first number of the calculation. Select a function such as add or subtract from the function map. Enter the second number of the calculation, and select =.

Application manager

With Application manager, you can see the software packages installed in your device. You can view details of installed applications, remove applications, and define installation settings.

Press , and select **Applications > 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 with the extension .sis or .six

Only install software specifically designed for your device: Nokia N82. Software providers will often refer to the official model number of this product: Nokia N82-1.


For application manager settings, see the extended user guide on the product support pages of the Nokia website.


Install applications and software

Installation files may be transferred to your device from a compatible computer, downloaded during browsing, or sent to you in a multimedia message as an e-mail attachment or using other connectivity methods, such as Bluetooth connectivity. You can use Nokia Application Installer in Nokia Nseries PC Suite to install an application to your device. If you use Microsoft Windows Explorer to transfer a file, save the file to a compatible memory card (local disk).

 indicates a .sis or .six application,  a Java application,  that the application is not fully



installed, and  that the application is installed on the memory card.

 **Important:** Only install and use applications and other software from trusted sources, such as applications that are Symbian Signed or have passed the Java Verified™ testing.


Before installation, note the following:

- To view the application type, version number, and the supplier or manufacturer of the application, select **Options** > **View details**.
To display the security certificate details of the application, in **Details**, scroll to **Certificates**, and select **View details**. See "Certificate management," p. 102.
- 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 backup 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 backup 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 an application or software, do the following:

1. To locate an installation file, press , and select **Applications** > **App. mgr.**. Alternatively, search the device memory or a compatible memory card (if inserted) in File manager, or open a message in **Messaging** > **Inbox** that contains an installation file.
2. In Application manager, select **Options** > **Install**. In other applications, scroll to the installation file, and select it to start the installation.


You cannot cancel the installation after you have started it.

During installation, the device shows information about the progress of the installation. If you install 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 select it. If the application does not have

a default folder defined, it is installed in the **Applications** folder in the main menu.

To see which software packages are installed or removed and when, select **Options > View log**.

 **Important:** Your device can only support one antivirus application. Having more than one application with antivirus functionality could affect performance and operation or cause the device to stop functioning.

After you install applications to a compatible memory card, installation files (.sis) remain in the device memory. The files may use large amounts of memory and prevent you from storing other files. To maintain sufficient memory, use Nokia PC Suite to back up installation files to a compatible PC, then use the file manager to remove the installation files from the device memory. If the .sis file is a message attachment, delete the message from the Messaging inbox.

See "File manager," p. 98.

Remove applications and software

Press , and select **Applications > App. mgr.**

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.





Tools folder

For information on Voice commands, Device manager, and synchronisation, see the extended user guide on the product support pages of the Nokia website.

File manager

To browse files and folders in the memory, press **Ⓛ**, and select **Tools > File mgr.**

When you open File manager, the device memory view () opens. Scroll right to open the memory card view (), if available.

To see how much memory different data types use, select **Options > Memory details**.

To find a file, select **Options > Find** and the memory from which to search. Enter a search text that matches the file name.

To mark files, select **Options > Mark/Unmark > Mark** or **Mark all**. To move or copy the files, select **Options > Move to folder** or **Copy to folder**.

Memory card tool

A compatible memory card may already be inserted in your device.

Press **Ⓛ**, and select **Tools > Utilities > Memory**.

To see how much memory different data types use, select **Options > Memory details**.

To back up information from the device memory to a compatible memory card, select **Options > Back up phone memory**. The device notifies you if there is not enough free space to create a backup.

To restore information from the compatible memory card to the device memory, select **Options > Restore from card**.

When a memory card is reformatted, all data on the card is permanently lost. Some memory cards are supplied preformatted and others require formatting; consult your retailer. The memory card supplied with your device does not need to be formatted.

To format a memory card, select **Options > Format memory card** and **Yes** to confirm.

Settings

Some settings may be preset for the device by your service provider, and you may not be able to change them.

For information on application settings, see the extended user guide on the product support pages of the Nokia website.

General settings

In general settings, you can edit the general settings of your device or restore the device to original default settings.

You can adjust time and date settings also in the clock.

Personalisation settings

Press , and select **Tools > Settings > General > Personalisation**.

You can edit settings related to the display, standby mode, and general functions of your device.

Themes allows you to change the look of the display. See "Themes," p. 77.

Voice comms. opens the settings for the Voice commands application.

Tones allows you to change the tones of the calendar, clock, and currently active profile.

Display

- **Light sensor** — Scroll left or right to adjust the light sensor that observes the lighting conditions and adjusts the brightness of the display. The light sensor may cause the display to flicker in low light.
- **Font size** — Adjust the size of the text and icons on the display.
- **Power saver time-out** — Select the time-out period after which the power saver is activated.
- **Welcome note / logo** — The welcome note or logo is displayed briefly each time you switch on the device.
- **Light time-out** — Select a time-out after which the backlight of the display is switched off.
- **Rotate screen** — Change the setting for automatic display rotation. In most applications, the display rotates automatically between portrait and landscape modes based on the orientation of the device. To ensure that the automatic display rotation works, hold the



device in an upright position. Automatic rotation is not functioning, if you change the display rotation setting manually in an application. When you exit the application, automatic rotation is activated again.

Standby mode

- **Active standby** — Activate shortcuts to applications in the standby mode.
- **Shortcuts** — Assign a shortcut to the selection keys in the standby mode.

If the active standby is set off, you can also assign keypad shortcuts for the different presses of the scroll key.

- **Active standby apps.** — If the active standby is set on, select the application shortcuts you want to appear in the active standby.
- **Operator logo** — This setting is only available if you have received and saved an operator logo. Select **Off** if you do not want the logo to be shown.

Language

Changing the settings for the phone language or writing language affects every application in your device, and the change remains effective until you change these settings again.

- **Phone language** — Change the language of the display text in your device. This 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.

- **Writing language** — Change the writing language. This affects the characters available when writing text and the predictive text dictionary used.
- **Predictive text** — Set predictive text input on or off for all editors in the device. The predictive text dictionary is not available for all languages.

Enhancement settings

Press , and select **Tools > Settings > General > Enhancement**.

Some enhancement connectors indicate which type of enhancement is connected to the device. See "Display indicators," p. 17.

The available settings depend on the type of enhancement. Select an enhancement and from the following:

- **Default profile** — Set the profile that you want activated each time you connect a certain compatible enhancement to your device.
- **Automatic answer** — Select whether you want 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.

- **Lights** — Set whether lights remain on or are switched off after the time-out. This setting is not available for all enhancements.

TV-out settings

To change the settings for a TV-out connection, select **TV-Out** and from the following:

- **Default profile** — Set the profile that you want activated each time you connect a Nokia Video Connectivity Cable to your device.
- **TV screen size** — Select the aspect ratio of the TV: **Normal** or **Widescreen** for widescreen TVs.
- **TV system** — Select the analogue video signal system that is compatible with your TV.
- **Flicker filter** — To improve image quality on the screen of your TV, select **On**. The flicker filter may not diminish image flicker on all TV screens.

Security settings

For security module settings, see the extended user guide on the product support pages of the Nokia website.

Phone and SIM


Press **⌘**, and select **Tools > Settings > General > Security > Phone and SIM card**.

- **PIN code request** — When active, the code is requested each time the device is switched on. Deactivating the PIN code request may not be allowed by some SIM cards.
- **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**.

If you forget the PIN or the PIN2 code, contact your service provider. If you forget the lock code, contact a Nokia Care point or your service provider. See "Access codes," p. 13.

Avoid using access codes similar to the emergency numbers to prevent accidental dialling of the emergency number.

- **Keypad autolock period** — Select whether the keypad is locked when your device has been idle for a certain period of time.

 **Tip:** To lock or unlock the keypad manually, press the left selection key, then *****.

- **Phone autolock period** — To avoid unauthorised use, you can set a time-out after which the device automatically locks. A locked device cannot be used until the correct lock code is entered. To turn off the autolock period, select **None**.



Tip: To lock the device manually, press the power key. A list of commands opens. Select **Lock phone**.

- **Lock if SIM card 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** — You can specify a group of people to whom you can call and who can call you (network service).
- **Confirm SIM services** — You can set the device to display confirmation messages when you are using a SIM card service (network service).

Certificate management

Press , and select **Tools > Settings > General > Security > Certificate management**.

Digital certificates do not guarantee safety; they are used to verify the origin of software.

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.

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.

For more information, see the extended user guide on the product support pages of the Nokia website.

Restore original settings

Press , and select **Tools > Settings > General > Factory settings**.

You can reset some of the settings to their original values. To do this, you need the lock code.

After resetting, the device may take a longer time to power on. Documents and files are unaffected.

Positioning settings

Press **Ⓜ**, and select **Tools > Settings > General > Positioning**.

Positioning methods

- **Integrated GPS** — Use the integrated GPS receiver of your device.
- **Assisted GPS** — Use Assisted GPS (A-GPS).
- **Bluetooth GPS** — Use a compatible external GPS receiver with Bluetooth connectivity.
- **Network based** — Use information from the cellular network (network service).

Positioning server

To define an access point, and positioning server for A-GPS, select **Positioning server**. The positioning server may be preset by your service provider, and you may not be able to edit the settings.

Phone settings

In phone settings, you can edit settings related to phone calls and network.

For information on call barring, see the extended user guide on the product support pages of the Nokia website.

Call settings

Press **Ⓜ**, and select **Tools > Settings > Phone > Call**.

- **Send my caller ID** — 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 service provider when you make a subscription (**Set by network**) (network service).
- **Call waiting** — If you have activated call waiting (network service), the network notifies you of a new incoming call while you have a call in progress. Set the function on (**Activate**) or off (**Cancel**), or check whether the function is activated (**Check status**).
- **Internet call waiting** — Select **Activated** to be notified of a new incoming internet call while you have a call in progress.
- **Internet call alert** — Select **On** to be alerted for incoming internet calls. If you select **Off**, you are not alerted, but a notification about missed calls appears.
- **Default call type** — To set internet calls as the default call type when making calls, select **Internet call**. If an internet call service is not available, a regular voice call is started instead.
- **Reject call with SMS** — To send a text message to a caller informing why you could not answer the call, select **Yes**.

- **Message text** — Write a text to be sent in a text message when you reject a call.
- **Image in video call** — If video is not sent during a video call, you can select a still image to be displayed instead.
- **Automatic redial** — Select **On**, and your device makes a maximum of 10 attempts to connect the call after an unsuccessful call attempt. To stop automatic redialling, press the end key.
- **Show call duration** — Activate this setting if you want the length of a call to be displayed during the call.
- **Speed dial** — Select **On**, and the numbers assigned to the number keys (2 to 9) can be dialled by pressing and holding the key.
- **Anykey answer** — Select **On**, and you can answer an incoming call by briefly pressing any keypad key, except the left and right selection keys, the power key, and the end key.
- **Line in use** — This setting (network service) 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 are not able to make calls. When line 2 is selected, **2** is shown in the standby mode.



Tip: To switch between the phone lines, press and hold # in the standby mode.


- **Line change** — To prevent line selection (network service), select **Disable** if supported by your SIM card. To change this setting, you need the PIN2 code.

Call divert

Press , and select **Tools > Settings > Phone > Call divert**.

Call divert allows you to divert your incoming calls to your voice mailbox or another phone number. For details, contact your service provider.


Select which calls you want to divert and the desired diverting option. Set the option on (**Activate**) or off (**Cancel**), or check whether the option is activated (**Check status**).

Several diverting options can be active at the same time. When all calls are diverted,  is shown in the standby mode.

Call barring and call diverting cannot be active at the same time.

Network settings

Press , and select **Tools > Settings > Phone > Network**.

Your device can automatically switch between the GSM and UMTS networks. The GSM network is indicated with  in the standby mode. The UMTS network is indicated with **3G**.

- **Network mode** — 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 wireless service providers. Contact your network service provider for details and roaming costs. This option is shown only if supported by the wireless service provider.
- **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. 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 cellular network.

A roaming agreement is an agreement between two or more 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.

Connection settings

In connection settings, you can edit access points and other connectivity settings.

You can also edit settings for Bluetooth connectivity in the Bluetooth connectivity application. See "Settings," p. 63.

You can also edit settings for data cable connections in the USB application. See "USB," p. 65.

For more information on connection settings, see the extended user guide on the product support pages of the Nokia website.

Access points

Create a new access point


Press , and select **Tools > Settings > Connection > Access points**.

You may receive access point settings in a message from a service provider. Some or all access points may be preset for your device by your service provider, and you may not be able to change, create, edit, or remove them.

 indicates a protected access point.

 indicates a packet data access point.

 indicates a WLAN access point.

 **Tip:** You can create internet access points in a wireless LAN with the WLAN wizard.

To create a new access point, select **Options > New access point**.

To edit the settings of an access point, select **Options > Edit**. Follow the instructions from your service provider.

- **Connection name** — Enter a descriptive name for the connection.
- **Data bearer** — Select the data connection type.

Depending on the 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, your service provider must support this feature, and if necessary, activate it for your SIM card.

Packet data access points

Press , and select **Tools > Settings > Connection > Access points > Options > Edit** or **New access point**.

Follow the instructions from your service provider.

- **Access point name** — You obtain the access point name from your service provider.
 - **User name** — The user name may be needed to make a data connection, and is usually provided by the service provider.
 - **Prompt password** — If you must enter the password every time you log in to a server, or if you do not want to save your password in the device, select **Yes**.
 - **Password** — A password may be needed to make a data connection and is usually provided by the service provider.
 - **Authentication** — Select **Secure** to always send your password encrypted or **Normal** to send your password encrypted when possible.
 - **Homepage** — Depending on the access point you are setting up, enter the web address or the address of the multimedia messaging centre.
- Select **Options > Advanced settings** to change the following settings:
- **Network type** — Select the internet protocol type to transfer data to and from your device. The other settings depend on the selected network type.
 - **Phone IP address (for IPV4 only)** — Enter the IP address of your device.
 - **DNS address** — Enter the IP addresses of the primary and secondary DNS servers, if required

by your service provider. Contact your internet service provider to obtain these addresses.

- **Proxy server address** — Enter the address of the proxy server.
- **Proxy port number** — Enter the port number of the proxy server.

WLAN internet access points

Press **⌘**, and select **Tools > Settings > Connection > Access points > Options > Edit or New access point**.

Follow the instructions from the WLAN service provider.

- **WLAN network name** — Select **Enter manually** or **Search for networks**. If you select an existing network, **WLAN network mode** and **WLAN security mode** are determined by the settings of its access point device.
- **Network status** — Define whether the network name is displayed.
- **WLAN network mode** — Select **Ad-hoc** to create an ad hoc network and to allow devices to send and receive data directly; a WLAN access point device is not needed. In an ad hoc network, all devices must use the same **WLAN network name**.
- **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.

To enter the settings for the selected security mode, select **WLAN security settings**.

For more information, see the extended user guide on the product support pages of the Nokia website.

Packet data settings

Press **⌘**, and select **Tools > Settings > Connection > Packet data**.


The packet data settings affect all access points using a packet data connection.

- **Packet data connection** — If you select **When available** and you are in a network that supports packet data, the device registers to the packet data network. Starting an active packet data connection (for example, to send and receive e-mail) is quicker. If there is no packet data coverage, the device periodically tries to establish a packet data connection. If you select **When needed**, the device uses a packet data connection only if you start an application or action that needs it.
- **Access point** — The access point name is needed to use your device as a packet data modem to a compatible computer.

- **High speed packet access** — Enable or disable the use of HSDPA (network service) in UMTS networks.

Wireless LAN settings

Press , and select **Tools > Settings > Connection > Wireless LAN**.

- **Show WLAN availability** — Select whether  is displayed in the standby mode when a wireless LAN is available.
- **Scan for networks** — If you set **Show WLAN availability** to **Yes**, select how often the device searches for available wireless LANs and updates the indicator.

To view advanced settings, select **Options > Advanced settings**. Changing wireless LAN advanced settings is not recommended.

Internet call settings

Press , and select **Tools > Settings > Connection > Internet tel..**

To create a new internet call profile, select **Options > New profile**.

To edit an existing profile, select **Options > Edit**.

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Battery information

Charging and discharging

Your device is powered by a rechargeable battery. 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.

If a replacement battery is being used for the first time or if the battery has not been used for a prolonged period, it may be necessary to connect the charger, then disconnect and reconnect it to begin charging the battery.

Unplug the charger from the electrical plug and the device when not in use. Do not leave a 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.



Do not dismantle or shred cells or batteries. In the event of a battery leak, do not allow the liquid to come in contact with the skin or eyes. In the event of such a leak, flush your skin or eyes immediately with water, or seek medical help.

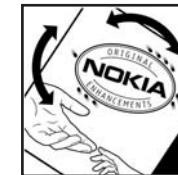
Nokia battery authentication guidelines

Always use original Nokia batteries for your safety. To check that you are getting an original Nokia battery, purchase it from an authorised Nokia dealer, and inspect the hologram label using the following steps:

Successful completion of the 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 authorised Nokia service point or dealer for assistance. Your authorised 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

1. When you look 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.



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 authorised 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 following suggestions 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. Unauthorized 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.
- To reset the device from time to time for optimum performance, power off the device and remove the battery.

These 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.

Disposal

 The crossed-out wheeled-bin symbol on your product, literature, or packaging reminds you that in the European Union all electrical and electronic products, batteries, and accumulators must be taken to separate collection at the end of their working life. Do not dispose of these products as unsorted municipal waste.

Return the products to collection to prevent possible harm to the environment or human health from uncontrolled waste disposal and to promote the sustainable reuse of material resources. Collection information is available from the product retailer, local waste authorities, national producer responsibility organizations, or your local Nokia representative. For more information, see product Eco-Declaration or country-specific information at www.nokia.com.

Additional safety information

Small children

Your device and its enhancements may contain small parts. Keep them out of the reach of small children.

Operating environment

This device meets RF exposure guidelines when used either in the normal use position against the ear or when positioned at least 1.5 centimeters (5/8 inch) 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.

To transmit data files or messages, this device requires a 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. 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.

Implanted medical devices

Manufacturers of medical devices recommend that a minimum separation of 15.3 centimeters (6 inches) should be maintained between a wireless device and an implanted medical device, such as a pacemaker or implanted cardioverter defibrillator, to avoid potential interference with the medical device. Persons who have such devices should:

- Always keep the wireless device more than 15.3 centimeters (6 inches) from the medical device when the wireless device is turned on.
- Not carry the wireless device in a breast pocket.
- Hold the wireless device to the ear opposite the medical device to minimize the potential for interference.
- Turn the wireless device off immediately if there is any reason to suspect that interference is taking place.
- Read and follow the directions from the manufacturer of their implanted medical device.

If you have any questions about using your wireless device with an implanted medical device, consult your health care provider.

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, and 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.




Additional safety information



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 and areas where the air contains chemicals or particles such as grain, dust, or metal powders. You should check with the manufacturers of vehicles using liquefied petroleum gas (such as propane or butane) to determine if this device can be safely used in their vicinity.

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 the end key 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 call key.

If certain features are in use, you may first need to turn those features off before you can make an emergency call. If the device is in the offline or flight profile mode, you may need to change the profile to activate the phone function before you can make

an emergency call. Consult this guide or your service provider for more information.

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.

Certification information (SAR)

This mobile device meets guidelines for exposure to radio waves.

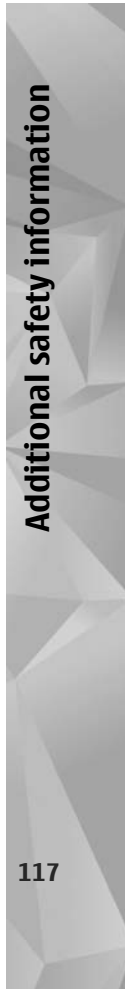
Your mobile device is a radio transmitter and receiver. It is designed not to exceed the limits for exposure to radio waves recommended by international guidelines. These guidelines were developed by the independent scientific organization ICNIRP and include safety margins designed to assure the protection 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 x.xx 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 one gram of tissue. The highest SAR value reported under this standard during product certification for use at the ear is 0.78 W/kg and when properly worn on the body is 0.87 W/kg. Information about this device model can be found at www.fcc.gov/oet/fccid by searching the equipment authorization system using FCC ID: QVVRM-313.



Index

A

- access codes 13
- access points 61, 105
- accessories
 - See *enhancements*
- activation keys 76
- active standby mode 78, 100
- active toolbar
 - in camera 24
 - in gallery 35
- address book
 - See *contacts*
- albums, media 36
- answering calls 88
- application manager 95
- applications 95
- attachments 81, 83
- audio messages 79

B

- backlight time-out 99
- battery
 - power saver setting 99
 - saving power 14
- blogs 56

Bluetooth connectivity

- device address 64
- device visibility 63
- pairing devices 64
- receiving data 65
- security 64
- sending data 64
- settings 63
- switching on/off 63

bookmarks 57

brightness, display 99

browser

- bookmarks 57
- browsing pages 55, 56
- cache memory 57
- security 58
- settings 58

C

cable connection 65

cache memory 57

calculator 95

calls 88

- answering 88
- duration of 92
- internet calls 91
- rejecting 88

settings 103

camera

- colour 32
- flash 26
- image quality 31
- imaging mode 25
- lighting 32
- scenes 27
- self-timer 28
- sequence mode 27
- settings 31
- video mode 30
- video quality 33

certificates 102

clock 78

computer connections 66

See also *data connections*

connection manager 62

contacts

- copying 94
- editing 93
- images in 93
- ringing tones 93
- saving 93

copyright protection 76

D

data connections
cable 65
PC connectivity 66
declining calls 88
dialled numbers 92
dismissing calls 88
display settings 99
DRM (digital rights management) 76
duration of calls 92

E

e-mail messages 82
enhancements settings 100

F

factory settings, restoring 102
feeds, news 56
font settings 99
formatting memory cards 98

G

gallery 34
general information 12
GPS (Global Positioning System) 45
grid view of menus 78

H

headset 21
help application 12
home network 41
HSDPA (high-speed downlink packet access) 18

I

IAPs (internet access points) 61
images
editing 37
printing 39, 40
sharing online 40
inbox, message 81
indicators and icons 17
installation of applications 95
internet calls 90
connecting 91
making 91
profiles 90, 108
settings 108
internet connection 55
See also *browser*

J

J2ME Java application support 95
Java scripts/applications 95

K

keyguard 101
keypad 101

L

landmarks 52
language settings 100
light settings 99
list view of menus 78
location information 45
lock code 13
locking
keypad 101
loudspeaker 21

M

mailbox
e-mail 82
video 88
voice 88
main menu 78
Maps 47
media
music player 70
RealPlayer 75
streaming 75
memory
clearing 15
web cache 57

messages

- e-mail 82
- folders for 79
- icon for incoming 81
- multimedia 81
- settings 83
- voice 88

Mini Map 56**MMS (multimedia message service) 79, 81**

- multimedia menu 19
- multimedia messages 79, 81
- music player 70
- muting sound 88
- my numbers 93

N

- navigation tools 45
- network settings 104
- news feeds 56

O

- offline mode 21
- operator logo 100
- outbox, message 79

P

- packet data connection**
 - access point settings 106
 - settings 107

page overview 56**personal certificates 102****personalisation 77, 99****phonebook**

See *contacts*

photographs

See *camera*

PictBridge 39**PIN code 13****PIN2 code 13****positioning information 45****positioning settings 103****power saver 99****presentations, multimedia 39, 81****printing**

images 39

profiles

internet call profile 90, 108
offline restrictions 21

proxy settings 107**PUK codes 13****R****RealPlayer 75****recording video clips 30****redial feature 104****rejecting calls 88****remote mailbox 82****ringing tones 77****roaming 104****S****scenes, image and video 27****screen settings 99****security**

- certificates 102
- web browser 58

security code 13**self-timer, camera 28****sent messages folder 79****setting wizard 16****settings**

- access points 105
- Bluetooth connectivity 63
- call divert 104
- calls 103
- camera 31
- certificates 102
- display 99
- enhancements 100
- home network 42
- internet call 108
- language 100
- network 104
- packet data 107
- packet data access points 106
- personalisation 99
- positioning 103

shortcuts 100
standby 100
tv-out 101
Video Centre 69
web browser 58
WLAN 108
WLAN internet access
points 107
shooting modes, camera 27
shortcuts 100
SIM card security 101
slide show 36
**SMS (short message
service)** 79
software applications 95
software update 12
songs 70
speaker phone 21
standby mode 78, 100
streaming media 75
Symbian applications 95

T

templates, message 80
text messages
receiving and reading 81
replying to 81
sending 79
settings 84
themes 77

time-out for backlight 99
tones
ring settings 77
settings 99
toolbar 24, 35
transferring data 16
transferring music 72
TV configuration 101
tv-out mode 38

U

unlocking keypad 101
UPIN code 13
**UPnP (Universal Plug and Play
architecture)** 41
UPUK code 13
USB cable connection 65

V

video calls 89, 90
voice calls
See calls
voice over IP (VOIP) 90
volume controls 21

W

wallpaper 77
web connection 55
web logs 56
welcome 16

welcome note 99
wireless LAN (WLAN) 60
wireless LAN settings 108

Z

zooming 25, 30

