

Profiles (Menu 4)



Your phone has various setting groups and profiles that can be customized for different events and environments.

At first, personalize the profiles to your liking and then you only need to activate a profile to use it. Available profiles are *Normal*, *Silent*, *Meeting*, *Outdoor*, and *Pager*.

Press **Menu**, and select *Profiles*. Scroll to a profile and press **Select**.

- To activate the selected profile, select *Select*.
- To set the profile to be active for a certain amount of time up to 24 hours, select *Timed* and set the end time. When the time set for the profile expires, the previous profile that was not timed becomes active.
- To customize the profile, select *Customize*. Select the setting you want to change and make the changes. Options are: *Ringling options*, *Ringling tone*, *Ringling volume*, *Vibrating alert*, *Message alert tone*, *Keypad tones*, *Warning tones*, and, *Alert for*.

The settings can also be changed in the *Tone settings* menu. See [Tone settings](#).

In addition you can rename a profile, *Profile name*. The *Normal* profile can not be renamed.



Note: To change the profile quickly in standby mode, press the power key **⓪**, scroll to the profile you want to activate and press **Select**.

Settings (Menu 5)



Right selection key settings

You can choose the right selection key shown on the start screen in standby mode. Select **Menu**, **Settings**, and scroll to *Right selection key settings*.

Options are: *Calculator, Calendar, Contacts, Create Message, Create MMS, Inbox, Meeting, Missed Calls, Multim. inbox* (Multimedia inbox), *Normal, Outdoor, Pager, Radio, Received calls, Silent*, and *Synchronization*. Scroll to the ones you prefer and select **Mark**.

"Go to" selection key

If you have several menu items that you use frequently, you can set the right selection key to **Go to** by marking multiple items in the *Right selection key settings*. This changes the right selection key name on the Start screen to **Go to**, instead of **Contacts**.

To set the right selection key to **Go to**, perform the following steps:

- 1 Select **Menu**, **Settings**, and scroll to *Right selection key settings*.
- 2 Press *Select options*, scroll to each of the options you want, select **Mark**, and press **Done**. Press **Yes** to save changes.
- 3 Select *Organize* to set the order of your selected options.

The first option is automatically highlighted when you press **Go to** with the right selection key).

- 4 Scroll to the option you want to organize and press [Move](#).

You can [Move up](#), [Move down](#), [Move to top](#), or [Move to bottom](#).

- 5 Press [Done](#) when you have the items in the order that you want; press [Yes](#) to save changes.

Press [Go to](#) on the start screen and [Select](#) to go to the first option in your list. Use the four-way scroll key to go to the other items in the list and press [Select](#).

Time and date settings

Clock

Press [Menu](#), and select [Settings](#), [Time and date settings](#), and [Clock](#).

Select [Show clock](#) to show the time on the top right of the display in standby mode. Select [Set the time](#) to adjust the clock to the correct time and [Time format](#) to select AM/PM or 24-hour time format.

The clock can be set for timed functions in [Messages](#), [Call log](#), [Alarm clock](#), [Profiles](#), [Calendar](#), and [Screen saver](#).

If the battery is removed from the phone for a long time, you may need to set the time again.

Date

Press [Menu](#), and select [Settings](#), [Time and date settings](#), and [Date](#).

Select *Show date* and the date is shown on the display when the phone is in standby mode. Select *Set the date* to adjust the date. You can also select the date format and date separator.

Auto update of date and time

Press *Menu*, and select *Settings*, *Time and date settings*, and *Auto-update of date & time* (network service). To set the phone to automatically update the time and date according to the current time zone, select *On*. To set the phone to ask for a confirmation before the update, select *Confirm first*.

The automatic update of the date and time does not change the time that you have set for the alarm clock, calendar or the alarm notes. They are in local time. Updating may cause some alarms that you have set to expire.

Call settings

Call forwarding

Press *Menu*, and select *Settings*, *Call settings* and *Call forward* (network service). With call forwarding you can direct your incoming calls to another number, for example, to your voice mailbox number. For details, contact your service provider. Forwarding options not supported by your SIM card or your network operator may not be shown.

Select the forwarding option you want, for example, select *Forward if busy* to forward the voice calls when your number is busy or when you decline an incoming call.

To set the forwarding setting to on, select [Activate](#); to set the forward setting to off, select [Cancel](#); or select [Check status](#) to check whether the forward is activated or not. To change the timeout when the call is forwarded, first select [Set delay](#) if this is available for the call forwarding option; then select [Activate](#) to set the call forwarding setting to on. Several forward options may be active at the same time.

To see the forwarding indicators in standby mode, see [Standby mode](#).

Anykey answer

Press [Menu](#), and select [Settings](#), [Call settings](#), then [Anykey answer](#). Select [On](#) and you can answer an incoming call by briefly pressing any key, except , selection keys  and , and .

Automatic redial

Press [Menu](#), and select [Settings](#), [Call settings](#), and [Automatic redial](#). Select [On](#) and your phone will make a maximum of 10 attempts to connect the call after an unsuccessful call attempt.

1-touch dialing

Press [Menu](#), and select [Settings](#), [Call settings](#), and [1-touching](#). Select [On](#). The names and phone numbers assigned to the 1-touching keys, from  to , can be dialed by pressing and holding the corresponding number key.

Call waiting

Press [Menu](#), and select [Settings](#), [Call settings](#), and [Call waiting](#). Select [Activate](#) and the network will notify you of an incoming call while you have a call in progress (system service). See [Call waiting](#).

Summary after call

Press **Menu**, and select *Settings*, *Call settings*, and *Summary after call*. Select *On* and the phone will briefly display the duration and cost (system service) of the last call.

Send my caller identity

Press **Menu**, and select *Settings*, *Call settings* and *Send my caller identity*. Select *Yes* and your phone number will be displayed to the person you are calling (system service). Select *Set by network* and the setting agreed upon with your service provider is used.

Line for outgoing calls

Line for outgoing calls is a system service. Select phone line 1 or 2 (subscriber numbers) for making calls.

Press **Menu**, and select *Settings*, *Call settings* and *Line for outgoing calls*. If you select *Line 2* and have not subscribed to this system service, you will not be able to make calls. However, calls on both lines can be answered regardless of the selected line.

If supported by your SIM card, you can prevent the line selection by selecting the *Lock* option.

For more information on availability, contact your service provider.



Note: In standby mode you can switch from one line to the other by pressing and holding .

Phone settings

Language

Press [Menu](#), and select [Settings](#), [Phone settings](#), and [Language](#). Select the language for the display texts. If [Automatic](#) is selected, the phone selects the language according to the information on the SIM card.

Automatic keyguard



Note: When Keyguard is on, calls may be possible to the emergency number programmed into your phone (such as 911 or other official emergency numbers). Key in the emergency number and press . The number is displayed only after you have keyed in its last digit.

You can set the keypad of your phone to lock automatically after a preset time delay. You can set the delay time from 10 seconds up to 60 minutes. When the time is up, the keypad locks automatically preventing accidental keypresses.

Press [Menu](#), and select [Settings](#), [Phone settings](#), and [Automatic keyguard](#).

- To activate the automatic keyguard, select [On](#) and the phone displays [Set delay](#). Key in the time and press [OK](#).
- To deactivate the automatic keyguard, select [Off](#).

See [Keypad lock \(keyguard\)](#).

Cell info display

Press [Menu](#), and select [Settings](#), [Phone settings](#), and [Cell info display](#). Select [On](#) to set the phone to indicate when it is used in a cellular system based on Microcellular network (MCN) technology.

If the [GPRS connection](#) is set to [Always online](#), the info messages may not be received. In that case, set the [GPRS connection](#) to [When needed](#). See [Settings when GPRS is the selected data bearer](#).

Welcome note

Press [Menu](#), and select [Settings](#), [Phone settings](#), and [Welcome note](#). Key in the note you would like to be shown briefly when the phone is switched on. To save the note, press [Options](#), and select [Save](#).

System selection

Press [Menu](#), and select [Settings](#), [Phone settings](#), and [System selection](#). Select [Automatic](#) and the phone automatically selects one of the cellular systems available in your area.

If you select [Manual](#), you can select a system that has a roaming agreement with your home network operator. If [No access](#) is displayed, you must select another system. The phone stays in manual mode until the automatic mode is selected or another SIM card is inserted into the phone.

Confirm SIM service actions

See [SIM services \(Menu 13\)](#).

Help text activation

To set the phone to show or not to show the help texts, press **Menu**, and select *Settings*, *Phone settings*, and *Help text activation*.

Start-up tone

To set the phone to play or not to play a start-up tone when the phone is switched on, press **Menu**, and select *Settings*, *Phone settings*, and *Start-up tone*.

Music settings

Equalizer

Press **Menu**, and select *Settings*, *Music settings*, and *Equalizer*. Select one of the preset sound styles: *Normal*, *Pop*, *R'n'B*, or *Rock*, or select *User set* to define and save your own sound style with customized equalizer settings.

Balance

Press **Menu**, and select *Settings*, *Music settings*, and *Balance* to adjust the balance using the four-way scroll key to move the balance button.

Loudness

Press **Menu**, and select *Settings*, *Music settings*, and *Loudness* to turn the loudness effect on or off.

Stereo widening

Press **Menu**, and select *Settings*, *Music settings*, and *Stereo widening* to turn the stereo widening effect on or off.

Restore default music settings

Press **Menu**, and select *Settings*, *Music settings*, and *Restore default music settings* to reset the music settings to their default values.

See [Music settings](#) for more information.

Display settings

Wallpaper

You can set your phone to display a background picture or wallpaper when the phone is in standby mode. Some pictures are pre-saved in the *Gallery* menu. You can also receive pictures using multimedia messages or download them from WAP pages, and save them in *Gallery*. Your phone supports JPEG, GIF, BMP and PNG formats.

Select a wallpaper picture

- 1 Press **Menu**, and select *Settings*, *Display settings*, and *Wallpaper*.
- 2 Select *Change image* and the folder list in the *Gallery* menu will be shown.
- 3 Select the folder and scroll to the desired picture.
- 4 To set the picture as wallpaper, press **Options**, and select *Set as wallpaper*.

If you delete the currently selected wallpaper picture from the gallery, it is still used, until you replace it with another picture.

The wallpaper is not displayed when the screen saver is activated.

Activate or deactivate the wallpaper

Press [Menu](#), and select [Settings](#), [Display settings](#), and [Wallpaper](#). To activate/deactivate the wallpaper, select [On](#) or [Off](#).

Color schemes

You can change the color in some display components, for example, indicators and signal bars.

Press [Menu](#), and select [Settings](#), [Display settings](#), and [Color schemes](#). Scroll through the colors to view them; then select the one you want.

Operator logo

To set your phone to display or hide the operator logo, press [Menu](#), and select [Settings](#), [Display settings](#), and [Operator logo](#).

Note that the operator logo is not displayed when the phone activates the screen saver.

For more information on availability of an operator logo using SMS, MMS or WAP, contact your network operator or service provider.

Screen saver timeout

The digital clock screen saver is used for power saving in standby mode. It will be activated when no function of the phone is used for a certain time. Press any key to deactivate the screen saver. Screen saver is also deactivated when the phone is out of the system coverage area.

Press [Menu](#), and select [Settings](#), [Display settings](#) and [Screen saver timeout](#). Select the timeout when the digital clock display will be activated. The length of the timeout can vary from 5 seconds to 60 minutes.

Note that the screen saver overrides all the graphics and texts on the display in standby mode.

Display brightness

You can change the display brightness level used on the phone display.

Press [Menu](#), and select [Settings](#), [Display settings](#), and [Display brightness](#). Scroll with [◀](#) and [▶](#) to decrease and increase the brightness level, and press [OK](#) to accept it.

Tone settings

Press [Menu](#), and select [Settings](#) and [Tone settings](#). You can find the same settings in the [Profiles](#) menu. See [Profiles \(Menu 4\)](#). Note that the settings you make, change the settings in the active profile.

Select [Ringing options](#) to select how the phone rings when someone calls you. The options are [Ringing](#), [Ascending](#), [Ring once](#), [Beep once](#) and [Silent](#).

Select [Ringing tone](#) for incoming voice calls. To select ringing tones that have been saved in the [Gallery](#), select [Open gallery](#) from the ringing tone list.

To select ringing tones that have been saved on the memory card, select [View memory card](#) from the ringing tone list.

You can also use music you have saved on the memory card as a ringing tone. Select [Ringing tone](#), then [View memory card](#).

Select [Ringing volume](#) and [Vibrating alert](#) for incoming voice calls and messages. The vibrating alert does not work when the phone is connected to a charger or a desktop stand.



Note: If you receive a ringing tone using OTA or by downloading, you can save the ringing tone in the [Gallery](#) or the memory card in your phone.

Select [Message alert tone](#) to set the alert tone for the incoming messages, [Keypad tones](#), or [Warning tones](#) to set the phone to sound tones for example, when the battery is running out of power.

Select [Alert for](#) to set the phone to ring only upon calls from phone numbers that belong to a selected caller group. Scroll to the caller group you want or [All calls](#) and press [Mark](#).

Security settings



Note: When security features that restrict calls are in use (call restricting, closed user group and fixed dialing), calls may be possible to certain emergency numbers in some networks (e.g. 911).

Press [Menu](#), and select [Settings](#), and [Security settings](#), and one of the following:

- [PIN code request](#) to set the phone to ask for your PIN code every time the phone is switched on. Some SIM cards do not allow the PIN code request to be turned off.

- *Fixed dialing* to restrict your outgoing calls to selected phone numbers if this function is supported by your SIM card. The PIN2 code is required.
- *Security level*. Select *Phone* and the phone will ask for the security code whenever a new SIM card is inserted into the phone.
- *Access codes* to change the security code, PIN code, PIN2 code or restriction password. Codes can only include numbers from 0 to 9.
- *Call restrictions* is a system service to restrict incoming calls to and outgoing calls from your phone. A restriction password is required.
- *Closed user group* is a system service that specifies the group of people whom you can call and who can call you. For more information contact your service provider.

Restore factory settings

To reset some of the menu settings to their original values, press *Menu*, and select *Settings* and *Restore factory settings*. Key in the security code and press *OK*. Note that the data you have keyed in or downloaded, for example, the names and phone numbers saved in *Contacts* are not deleted.

Enhancement settings

This menu is shown only if the phone is or has been connected to a compatible headset or loopset.

The enhancement settings menu allows you to activate *Automatic answer* and to select which profile is activated when you connect compatible headsets. The loopset LPS-4, for people with T-coil equipped hearing aids, can also be activated.

Press *Menu*, and select *Settings* and *Enhancement settings*. You can select *Headset*, *Loopset* or *TTY/TDD* if the corresponding accessory is or has been connected to the phone.

Headset/Loopset

- Select *Default profile* to select the profile you want automatically activated when you connect the selected enhancement. You can select another profile while the enhancement is connected.
- Select *Automatic answer* to set the phone to answer an incoming call automatically after five seconds. If the *Incoming call alert* is set to *Beep once* or *Off*, automatic answer will not be in use.

TTY/TDD

- Select *TTY/TDD* to set the phone to use the loopset LPS-4. Select *Use TTY*, then *Yes* to activate. Select *No* to turn this setting off.

Music (Menu 6)



You can listen to MP3 or AAC music files with the *Music player*, or to the *Radio* with your phone. You can also record music from the *Radio* or an external music source. You can record or transfer music files of up to 2 hours of near CD-quality music to a 64-MB memory card.



Note: Your phone must be switched on to use this function. Do not switch the phone on when wireless phone use is prohibited or when it may cause interference or danger.

To transferring music files from a PC, see [Nokia Audio Manager](#).

You can quickly turn on and off and switch between the music functions with the *Music key* on the top of the phone. Press  to select *Music player*, *Radio* or *Music off*.

- A quick press of the *Music key* switches between the *Music player*, *Radio*, and *Music off*.
- A long press of the *Music key* selects and starts the music function.

Music player

With the *Music player* you can listen to the music tracks stored on the memory card in your phone.

You can listen to music using the internal loudspeaker, or the HDS-3H (stereo) or HDB-4 (mono) headset.



Warning: Using the stereo headset may affect your ability to hear sounds around you. Do not use this headset in situations that may endanger your safety.

To turn on the *Music player*, press *Menu*, and select *Music* and *Music player*. Details of the first track on the track list are shown.



Note: You must have a memory card containing audio files inserted in the phone to use the *Music player*.

When the *Music player* is on, press *Options* and select one of the following:

- *Play* to play the current track on the track list, or *Stop* to stop the playback.
- *Track list* to activate track lists that you have created on a PC as playlists and transferred to the memory card in your phone. See [Track list](#).
- *Play options*:
Select *Random* to play the tracks on the track list in random order.
Select *Continuous* to play the current track or the whole track list through repeatedly.
- *Music downloads* to connect to the WAP address attached to the current track. This function is only available when a WAP address is attached to the current track.
- *Memory status* to check the amount of free and used memory on the memory card.



Note: When the phone is in standby mode and the *Music player* is active in the background, you can control the player by simultaneously pressing the *Music key* and the appropriate function on the four-way scroll key.

To adjust the volume level, use the *Volume key* on the top of the phone.



Warning: Listen to music at a moderate level. Continuous exposure to high volume may damage your hearing.

Listening to music

To rewind the current track, press and hold *⏮*.

To fast forward the current track, press and hold *⏭*.

To skip to the next or previous track on the track list, quickly press *⏭* or *⏮*, respectively.



Note: In standby mode, you can skip to the next or previous track by simultaneously pressing the *Music key* and *⏭* or *⏮*, respectively.

To select a track from the track list, press *Options*, and select *Track list*. Scroll to the track you want, press *Options* and select *Play*.

To stop the playback, press *■*.

To listen to music using the loudspeaker (or headset), press *Options* and select *Loudspeaker* or *Headset*.



Note: When using the headset HDB-4 and HDS-3H, press the headset key quickly to skip to the next track on the track list. Press and hold the headset key to turn off the *Music player*.

You can make a call or answer an incoming call while listening to music. During a call, the playback is stopped.

Radio

To listen to the radio on your phone connect the HDS-3 (stereo) or HDB-4 (mono) headset to the phone. The headset cable functions as the antenna of the radio, so let it hang freely.

To adjust the volume level, use the **Volume key** on the top of the phone.



Warning: Listen to music at a moderate level. Continuous exposure to high volume may damage your hearing.

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

- 1 To turn on the radio, press **Menu**, and select **Music** and **Radio**.

The station location number, name, and frequency of the radio station are displayed.

OR

To quickly turn on the radio, press the **Music key** on the top of the phone and select **Radio**.

- 2 If you have already saved radio stations, you can scroll to the station you want to listen to, or select a radio station location 1 to 20 by pressing the corresponding number key.

When using the HDB-4 and HDS-3 headset, press the headset key to scroll to the desired saved radio station.

When the phone is in standby mode and the radio is on in the background, you can scroll to the next or previously saved radio station by pressing ►► or ◀◀, respectively.

- 3 When the radio is on, press **Options** and select **Switch off** to turn off the radio.

OR

To quickly turn off the radio, press and hold .

Tune a radio station

When the radio is on, press and hold ►► or ◀◀ to start the station search. Searching stops when a station is found. To save the station, press **Options**, and select **Save station**. Key in the name of the station and press **OK**. Select the location where you want to save the station.



Note: To quickly save the station in a location 1-20, press and hold the corresponding number key, then key in the name of the station and press **OK**.

Use the radio

When the radio is on, press **Options** and select one of the following functions:

- **Turn off** to turn off the radio.

- **Save station** to save the radio station you have found. Key in the name of the station and press **OK**. Select the location where you want to save the station. Up to 20 radio stations can be saved.
- **Automatic tuning**. Briefly press either **⏮** or **⏭** on the scroll key to start the station search upwards or downwards. The search stops when a station has been found; press **OK** and save the station.
- **Manual tuning**. Briefly press either **⏮** or **⏭** on the scroll key to move the station search upward or downward in 0.1-MHz increments or press and hold down the key to quickly search upward or downward for a station. To save the station you have found, press **OK** and save.

To quickly select **Manual tuning**, press **#** when in the **Radio** menu.

Set frequency. If you know the frequency of the radio station you would like to listen to (between 87.5 and 108.0 MHz), key it in and press **OK** and save.

To quickly select **Set frequency**, press ***8** when in the **Radio** menu.

- **Delete station**. To delete a saved station, scroll to the station, and press **Delete**, and **OK**.
- **Rename**. Key in a new name for the saved station and press **OK**.
- **Loudspeaker** or **Headset** to listen to the radio using the loudspeaker or headset). Keep the headset connected to the phone. The lead of the headset functions as the antenna of the radio.
- **Mono output** or **Stereo output** to listen to the radio in mono or in stereo.

You can make a call or answer an incoming call while listening to the radio. The volume of the radio is muted. When you end the call, the radio will automatically be turned on.

Sending or receiving data using a GPRS or HSCSD connection may interfere with the radio.

Recorder

You can record music directly from the radio in your phone, or you can connect your phone to a compatible external audio source, for example, a CD-player to record your favorite music. Your recordings are saved to the memory card in your phone.



Note: Obey all laws when using this feature. Copyright protections may prevent some content from being copied, modified, transferred or forwarded.

To turn on the [Recorder](#), press [Menu](#), and select [Music](#) and [Recorder](#).

Record

To record from the radio, turn on the radio, press [Menu](#) and select [Music](#) and [Recorder](#). To start recording, select [Record](#).

To record from external audio equipment, connect the source device to the line-in connector of the phone using the ADE-2 audio cable.

When *Device connected – start recording?* is displayed:

- Press **Yes** to start recording.
- Press **No** to just listen to the music played by the connected device. You can start recording by selecting *Recorder* and *Record* from the *Music* menu.

To stop recording, press **Stop**. To save the recording, press **Yes** when a confirmation note is displayed. To delete the recording, press **No**.

- If you select to save the recording, key in the track title and press **OK**. Key in the artist name and press **OK**.

You cannot make phone calls while recording. To make a call, first cancel the recording.

If you receive a phone call while recording music, the recording is stopped. You can choose to **Save** or **Discard** the interrupted recording.

Recording list

To view a list of your recordings, select *Recording list*.

While the recording list is displayed, you can press **Options** and select one of the following functions:

- *Play* to play the selected recording
- *Delete* to delete the selected recording
- *Rename* to change the track title and artist name of the selected recording

Track list

With [Track list](#) you can activate track list that you have created on a PC as playlists and transferred to the memory card in your phone. To transfer playlists from a PC, see [Nokia Audio Manager](#).

When the [Music player](#) is on, press [Options](#) and select [Track list](#). By default, all the music tracks on the memory card in your phone are shown. If you have activated a playlist, only tracks on the activated playlist are shown.

Activate and deactivate playlists

Open [Track list](#), press [Options](#) and select [Change track list](#). Scroll to the playlist you want to activate and press [Select](#).

To deactivate playlists and show all tracks on the memory card in the phone, select [All tracks](#).

Other options available in Track list

- [Play](#) to play the currently selected track.
- [Refresh all tracks](#) to update the [Track list](#) after you have transferred music files or playlists from a PC. This option is only available when playlists are deactivated and all tracks on the memory card are shown.

Music settings

You can select a preset sound style of the music tracks you play to automatically set equalizer settings, or define your own sound style with customized equalizer settings. You can also adjust the balance, and turn the

loudness and stereo widening effects on and off. This may enhance playback quality and audibility. You can also reset the music settings to their default values.

The music settings apply to the *Music player* and the *Radio*. During recording and when using the loudspeaker, the music settings are turned off. The stereo widening effect does not apply to the *Radio*.

To access the music settings, press *Menu*, and select *Settings* and *Music settings*.

To select a preset sound style with automatic equalizer settings or define your own sound style with customized settings, select *Equalizer*.

- To select a preset sound style, scroll to the style you want and press *OK*. The available preset sound styles are *Normal*, *Rock*, *Pop*, and *R'n'B*.
- To define your own equalizer settings, select *User set*. Select the frequency slider bar to adjust with  and . Adjust the position of the slider with  and . Press *OK* to save the settings.

To adjust the balance, select *Balance*. Move the slider to the left or right by pressing  or , respectively. Press *Select* to save the balance setting.

To turn the loudness effect on or off, select *Loudness* and then *On* or *Off*.

To turn the stereo widening effect on or off, select *Stereo widening* and then *On* or *Off*.

To reset the music settings to their default values, select *Restore default music settings* and press *Yes* to confirm.

Nokia Audio Manager

With Nokia Audio Manager, you can select digital music tracks on a compatible PC and transfer them to a memory card in your phone. The Nokia Audio Manager software also allows you to create M3U playlists on the PC.

In order for the PC to access the memory card in the phone, you must connect your phone to the PC using the supplied DKU-2 USB data cable. See [Attach and use supplied cables](#). The contents of the memory card can then be displayed in the Mobile Device area of the Music Studio window of the Nokia Audio Manager.



Note: You cannot make phone calls while your phone is connected to a PC.

When using Nokia Audio Manager, you only need to connect your phone to the PC; everything else is done on the PC.



Note: Obey all laws when using this feature. Copyright protections may prevent some content from being copied, modified, transferred or forwarded.

System requirements

To install and use Nokia Audio Manager, you need the following:

- An Intel compatible PC running Windows 98, Windows ME, Windows 2000, or Windows XP operating system

Note that the software is not supported on a PC which has had its system upgraded from Windows 95 or 3.1 to Windows 98.

- Pentium MMC 266 MHz CPU (Pentium 300 MHz recommended)
- At least 35 MB of free disc space. Additional space for music tracks.
- Minimum of 48 MB of memory space recommended; 64 MB is recommended for Windows 2000
- Display with 800 x 600 pixels and more than 65536 colors with High Color setting
- Browser that is version 4.0 or higher of either Microsoft Internet Explorer or Netscape Navigator
- USB port
- CD ROM drive

Install Nokia Audio Manager



Note: Do not connect the DKU-2 cable to your PC before you have installed the Nokia Audio Manager PC software from the CD-ROM in the sales package.

- 1 Start Windows.
- 2 Insert the CD-ROM supplied in the sales package in the CD-ROM drive of your PC.
- 3 If the CD-ROM does not launch itself automatically, open Windows Explorer and select the CD-ROM drive where you inserted the CD-ROM.
- 4 Right-click the Nokia Audio Manager icon and select Autorun.

- 5 Follow the installation instructions that appear on the display of the computer to successfully complete the installation.

When the installation is complete, Nokia Audio Manager folder is added to your program files.

- 6 Restart the computer after installation of the Nokia Audio Manager software.

Save CD tracks with Nokia Audio Manager

- 1 On the PC, open Nokia Audio Manager.
- 2 Insert a music CD in the CD drive of your PC and click on the CD Player tab.
- 3 By default, all track information should be displayed. If not, click on the **Load CD** button.
- 4 To save tracks onto your hard disk, select the tracks you want and click the **Save tracks** button.

Do not remove the CD until the save operation is complete. A progress bar will indicate approximately how long it will take to save the tracks.

- 5 To transfer the saved tracks to the **Music Studio**, click the **+ Add** button, select the required tracks, and click **Open**.
- 6 Transfer the tracks to the **Music Studio**: In the **Music Studio**, click the **Add** button and browse for the saved music tracks. Select the required track(s), right-click on the selection and select **Open** from the shortcut menu.

Transfer music files to your phone

- 1 Save the tracks and playlists in the **Music Studio** of the Nokia Audio Manager.
See the previous section or the Audio Manager Help for further instructions.
- 2 Check that the PC and phone are connected with the supplied DKU-2 cable.
- 3 On the PC, open Nokia Audio Manager.
- 4 Click on the icon in the mobile device area of the **Music Studio**.
- 5 Highlight the tracks or playlists that you want to transfer to your phone by clicking on them.
- 6 Click **Transfer to device**.

If you selected more music than can fit on the phone memory, you get an error message. Deselect some of your selected music tracks until the selection fits.

Disconnect the USB cable properly

Proper use of the USB cable is important when you are connecting or disconnecting the cable from your PC.

To disconnect the USB cable:

- 1 Stop the USB connection **before** you remove the cable from the phone or PC by using the Windows systems icon on the taskbar at the bottom of the PC screen or with the device manager.

2 Unplug the USB cable from the PC.

If the USB cable is stopped, but you have not unplugged the cable, the Windows operating system and the Nokia Audio Manager will not be able to display correct information. Both systems will continue indicating that the USB cable is connected to the PC, but will not be able to read the contents.

If you accidentally disconnect the cable without first stopping the connection, remove the cable and connect it again. The Nokia Audio Manager and the Windows device manager will then display the information correctly.



Important: Unplugging the DKU-2 USB cable while tracks are being transferred to the phone is "unsafe removal" of the cable. This may cause loss of data, corrupted data, or the PC system may become unstable. Loss of power while the DKU-2 USB cable is connected to the PC also results in an "unsafe removal" condition.

Music file size and track length

Nokia Audio Manager displays music tracks according to file size and track length depending on how many bytes are in a file and the sector size on a disk. The file size of each track in Nokia Audio Manager is calculated mathematically, based on the actual amount of data in a file.

However, Windows applications calculate actual file size and sector size used in Windows Explorer. Sometimes, if a file is small, the size is rounded up to the next sector size on a hard disk. Also, certain MMC cards use different ways of calculating and reporting the size of stored data than hard disks.

This means that you could see a song with more than one file size and track length depending on the type of disk where the file is stored and the PC operating system. The difference is slight, usually not more than one or two seconds. The difference is only in the method used to calculate size. The entire song is stored in both files.

Other features

Music track types supported

The Nokia Audio Manager supports MP3 and AAC music tracks and M3U playlists. Playlists can be created in the Music Studio. When a playlist is selected for transfer to the phone, only the tracks named in the playlist are transferred. Tracks created by the CD player have a file extension .AAC. These files can be played on the PC by the Nokia Audio Manager and transferred to the phone.

Edit fields in tracks on the PC

When tracks or playlists are displayed in the [Music Studio](#), it is possible to edit track and artist information. See the [Nokia Audio Manager](#) help for further details.

Transfer music files using Windows Explorer

After you have installed the Nokia Audio Manager, it is possible to use Windows Explorer to transfer MP3 or .AAC music tracks to your phone.

MP3 files

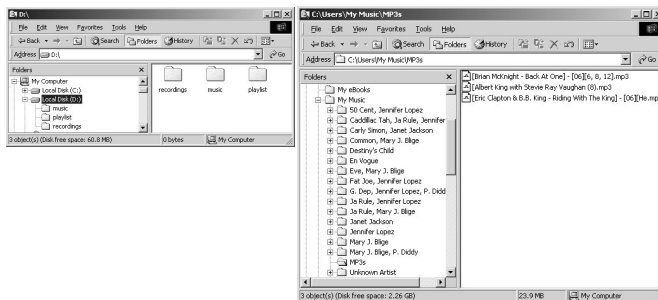
- 1 Connect your PC and your phone with the supplied DKU-2 USB cable.

Data enhancement connected is displayed on your phone.

- 2 Open Windows Explorer. Your phone will appear as a local drive (named by Nokia 3300), and with a drive letter assigned to it.

Three folders are shown: [music](#), [playlist](#), and [recordings](#).

- 3 Click on the folders to display a window that shows the contents of the folder on the phone memory card.
- 4 Open a second instance of Windows Explorer and display the contents of the folder on your PC where you have MP3 files stored.



- 5 Select the MP3 files on your PC that you wish to transfer to the phone.
- 6 Drag and drop the files from the second window into the first window and place in the **music** folder.

The files are transferred to the phone and can be played by the **Music player**.

If you selected more music than can fit on the phone memory, you get an error note. Deselect some of your selected music tracks until the selection fits.

- 7 Disconnect the USB cable by double-clicking the green arrow on the taskbar at the bottom of your PC screen.

A window pops up that shows **Unplug** or **Eject Hardware**.

- 8 Click on USB Device in the Hardware devices window.

A popup window shows **Stop a Hardware device**.

- 9 Highlight *USB device* and click **OK**.

The popup window Safe to Remove Hardware is shown with the message "The 'USB Device' device can now be safely removed from the system."

- 10 Click **OK**.

ACC files

Your phone also supports advanced audio coding (ACC) files. These are recorded from a CD player, the FM radio in your phone, or other external music devices.

- 1 Connect the ADE-2 recording cable to your phone and to the external music device, such as a CD-Player.

Your phone displays *Device connected, start recording?*

- 2 Select the track from the CD player that you want to record.

If you are using a CD player on your PC, select the track from a list on the CD player on your desktop.

- 3 Begin playing the selected track and select **Yes** on your phone display to start recording.

Begin the play and record at the same time to make sure you record the song from the beginning.

Recording via audio cable is shown on your phone's display.

- 4 Press **Stop** when the song ends on the CD player.
The phone display shows *Recorder stopped* and then *Save* and *Discard*.
- 5 Select **Save**.
- 6 Enter the *Track name*: and press **OK**.
- 7 Enter the *Artist*: name and press **OK**.
Saving recording and *Recording saved* are displayed. You can then see the track name and artist in the *Recording list* on the phone display.
- 8 Select **Options** to *Play*, *Delete*, or *Rename*.
- 9 To record another song from the CD player, select *Back* twice to return to the *Record* option. Repeat steps 3–8.

Record from a radio

- 1 Connect the ADE-2 recording cable to the headphone connector on the radio and to your phone.
- 2 Begin playing the selected track and select **Yes** on your phone display to start recording.
Begin the play and record at the same time to make sure you record the song from the beginning.
Recording via audio cable is shown on your phone's display.
- 3 Press **Stop** when the song ends.
The phone display shows *Recorder stopped* and then *Save* and *Discard*.

- 4 Select **Save**.
- 5 Enter the *Track name*: and press **OK**.
- 6 Enter the *Artist*: name and press **OK**.
Saving recording and *Recording saved* are displayed. You can then see the track name and artist in the *Recording list* on the phone display.
- 7 Select **Options** to *Play*, *Delete*, or *Rename*.
- 8 To name the recording go to **Menu** and scroll to *Music* and select. Select *Recorder*, then *Recording list*.
The recording is saved and shown as *Track list - Artist*.
- 9 Select **Options**, then scroll to and select *Rename*.
In the *New name*: window, press **Clear** until the window is empty.
- 10 Enter the name and artist and press **OK**.
The phone displays *File renamed*, and the new name appears in *Recording list*.

Record from the FM radio in your phone

You can record music from the FM radio in your phone while listening with the headset or with the loudspeaker.

- 1 Go to **Menu** and scroll to and select *Music*.
- 2 Scroll to *Recorder*, and select *Record*.
Recording via audio cable is shown on your phone display.

- 3 Press **Stop** to end the recording.

The phone display shows *Recorder stopped* and then *Save* and *Discard*.

- 4 Select **Save**, then enter the *Track name:* and press **OK**.

- 5 Enter the *Artist:* name and press **OK**.

Saving recording and *Recording saved* are displayed. You can then see the track name and artist in the *Recording list* on the phone display.

- 6 Select **Options** to *Play*, *Delete*, or *Rename*.

- 7 If you want to rename a recording, select **Options**, then scroll to and select *Rename*.

- 8 In the *New name:* window, press **Clear** until the window is empty.

- 9 Enter the name and artist and press **OK**.

The phone displays *File renamed*, and the new name appears in *Recording list*.

Games (Menu 7)

Launching a game



- 1 Press **Menu**, and select **Games** and **Select game**.
- 2 Scroll to a game or a game set (name depends on the game).
- 3 Press **Options** and select **Open** or press .

If the selection is a single game it will be launched. Otherwise, a list of games in the selected game set is displayed.

- 4 To launch a single game, scroll to the desired game and press **Options** and select **Open**, or press .



Note: If a game uses the whole display area, no selection key names are displayed. Press the selection key  or  to show the options list. Then select one of the options or press **Back** to continue with the game.

The game keys on your keyboard are shown in a darker gray than the other keys.

The 3300 music phone supports multiple simultaneous keypresses during game play. It is possible to move diagonally, left and up by pressing the "E" and "R" keys simultaneously. You could even press "Fire" in parallel.

The functions of the game keys are listed in the following table:

Game keys and functions		
 Move left	 Move up	 Move right
 Move left	 Move down	 Move right
 Fire		
 Game action key = Tasks and Jump		

Game downloads

Press [Menu](#), and select [Games](#) and [Game downloads](#). The list of available WAP bookmarks is shown. Select [More bookmarks](#) to access the list of WAP bookmarks in the [Services](#) menu. See [Use bookmarks](#).

Select the appropriate bookmark to connect to the desired WAP page. If the connection fails, you may not be able to access the WAP page from the WAP service whose connection settings are currently active. In this case, enter the [Services](#) menu and activate another set of service settings. Try again to connect to the WAP page.

For the availability of different WAP services, pricing, and tariffs, contact your service provider or internet service provider.

Note that when downloading a game or an application, it may be saved in the [Applications](#) menu instead of the [Games](#) menu.



Note: Only install software from sources that offer adequate protection against viruses and other harmful software.

Memory

To view free memory available for game and application installations, press [Menu](#), and select [Games](#) and [Memory](#). See also [Memory status for applications](#).

The games use shared memory. See [Shared memory](#).

Settings

Press [Menu](#), and select [Games](#) and [Settings](#) to set sounds, lights, and shakes for the game.

Applications (Menu 8)



Note: The phone must be switched on to use this function. Do not switch on the phone when the use of a wireless phone is prohibited or when it may cause interference or danger.

This menu allows the management of Java applications installed on your phone. Your phone software includes some Java applications specially designed for this Nokia phone. Various service providers offer other applications through browser services. Before you can use one of these applications you have to download it to your phone.

Launching an application

- 1 Press **Menu**, and select *Applications* and *Select application*.
- 2 Scroll to an application or an application set (name depends on the application).
- 3 Press **Options** and select *Open*.

If the selection is a single application it will be launched. Otherwise, a list of applications in the selected application set is displayed.

- 4 To launch a single application, scroll to the desired application and press **Options** and select *Open*.

If an application uses the whole display area, no selection key names are displayed.

- 5 Press the selection key  or  to show the options list.
- 6 Select one of the options or press **Back** to continue with the application.

Other options available for an application or application set

- *Delete* to delete the application or application set from the phone.
- *Web access* to restrict the application for accessing the system. Select *Ask first* and the phone asks for net access, *Allowed* to allow the net access, or *Not allowed* not to allow the net access.
- *Update version* to check if a new version of the application is available for download from the WAP services.
- *Missing text* to provide further information or additional data for the application from an Internet page. This feature must be supported by the network. It is only shown if an Internet address has been provided with the application.
- *Details* to give additional information about the application.

Download an application

You can download new Java applications in different ways:

- Press **Menu**, and select *Applications* and *App. services*. The list of available

WAP bookmarks is shown. Select [More bookmarks](#) to access the list of WAP bookmarks in the [Services](#) menu. See [Use bookmarks](#).

- Select the appropriate bookmark to connect to the desired WAP page. If the connection fails, you may not be able to access the WAP page from the WAP service whose connection settings are currently active. In this case, enter the [Services](#) menu and activate another set of service settings, see [Set up for browsing](#). Try again to connect to the WAP page.

For the availability of different WAP services, pricing and tariffs, contact your network operator and/or the WAP service provider.

- Press [Menu](#), and select [Services](#) to find a WAP page to download an appropriate Java application. See [Use browser options](#).
- Use the game download functionality, see [Game downloads](#).



Note: Only install sources that offer adequate protection against harmful software.

When downloading a game or an application, it may be saved in [Games](#) menu instead of the [Applications](#) menu.

Memory status for applications

To view the size of memory available for game and application installations, press [Menu](#), and select [Applications](#) and [Memory](#).

Applications use shared memory. See [Shared memory](#).

Organizer (Menu 9)



Warning: All of the features in this device, other than the alarm clock, require the phone to be switched on to use the features. Do not switch the device on when wireless phone use may cause interference or danger.

Alarm clock

The alarm clock uses the time format (24-hour or am/pm) set for the clock. The alarm clock works even when the phone is switched off.

Press **Menu**, and select **Organizer** and **Alarm clock**. Key in the alarm time and press **OK**. Select am or pm if you are using this time format. The start screen displays 🕒 when an alarm is set.

When you have already set an alarm, you can change it by selecting **On**. Then key in the new alarm time.

When the alarm goes off, your phone sounds an alert tone and flash **Alarm!** with the current time on the start screen.

Press **Stop** to stop the alarm. If you let the alarm sound without stopping it, or if you press **Snooze**, the alarm will go off again in 10 minutes.

When your phone is switched off, and you have an alarm set, the phone switches on at the time of the alarm. If you press **Stop**, the phone displays *Switch the phone on?* Press **No** to switch off the phone or **Yes** to make and receive calls.



Note: Do not press **Yes** when wireless phone use is prohibited or when it may cause interference or danger.

Calendar

The calendar helps you to keep track of reminders, calls that you need to make, meetings, and birthdays.

The calendar uses shared memory. See [Shared memory](#).

Press **Menu**, and select *Organizer* and *Calendar*.

Scroll to the day you want. The current day is indicated with a frame around the day. If there are any notes set for the day, the day is bolded. To view the day notes, press **Options** and select *Day notes*.

To view a single note, scroll to the note you want to view, press **Options** and select *View*. The note view allows you to view the details of the selected note. You can scroll through the note.

The other options for the calendar views may include the following:

- Options for making a note, for sending a note as a note directly to another phone calendar, or as a text message.

- Options for deleting, editing, moving, and repeating a note, and for copying a note to another day.
- [Settings](#) to set the date, time, date or time format, or the first day of the week. In the [Auto-delete](#) option you can set the phone to delete old notes automatically after a specified time. However, the repeat notes, for example, birthday notes, will not be deleted.

Make a calendar note

For keying in letters and numbers, see [Write text](#).

Press [Menu](#), and select [Organizer](#) and [Calendar](#). Scroll to the date you want, press [Options](#), and select [Make a note](#). Select one of the following note types:

-  [Meeting](#) - Key in the note (or press [Options](#) and search for the name in [Contacts](#). Press [Options](#) and select [Save](#). Key in the location for the meeting and press [Options](#) and select [Save](#). Key in the start time for the meeting and press [OK](#), and then the end time and press [OK](#). To set the alarm for the note, select [With tone](#) or [Silent](#) (no alarm tone) and then set the alarm time.
-  [Call](#) - Key in the phone number, press [Options](#) and select [Save](#). Key in the name, press [Options](#) and select [Save](#). (Instead of keying in the phone number, press [Options](#) to search for the name and number in [Contacts](#). Then key in the time for the call and press [OK](#). To set the alarm for the note, select [With tone](#) or [Silent](#) (no alarm tone) and then set the alarm time.

-  **Birthday** - Key in the person's name (or press **Options** and search for it in **Contacts**, press **Options** and select **Save**. Then key in the year of birth, and press **OK**. To set the alarm for the note, select **With tone** or **Silent** (no alarm tone) and then set the alarm time.
-  **Memo** - Key in the note, press **Options** and select **Save**. Key in the end day for the note and press **OK**. To set the alarm for the note, select **With tone** or **Silent** (no alarm tone) and then set the alarm time.
-  **Reminder** - Key in the subject for the reminder, press **Options** and select **Save**. To set the alarm for the note, select **Alarm on** and then set the alarm time.

When you have set the alarm, the indicator  is displayed when you view the notes.

Note alarm

The phone beeps, and displays the note. With a call note  on the display, you can call the displayed number by pressing . To stop the alarm and view the note, press **View**. To stop the alarm without viewing the note, press **Exit**.

To-do list

You can save a note for a task that you have to do, select a priority level for the note and mark it as done when you have completed it. You can sort the notes by priority or by date.

The to-do list uses shared memory, see [Shared memory](#).

- 1 Press **Menu**, and select *Organizer* and *To-do list* and the list of notes is shown.
- 2 Press **Options**, or scroll to the desired note and press **Options**.
 - To add a new note, select *Add*. Key in the subject for the note. When you have keyed in the maximum number of characters for a note, no more characters are accepted. Press **Options** and select *Save*. Select the priority for the note, *High*, *Medium*, or *Low*.
 - You can set, delete and edit the deadline and an alarm for a note, and you can also view, delete or edit the selected note and delete all the notes that you have marked as done. You can edit the priority of the selected note, send a note to another phone, save a note as a calendar note, or access the calendar.

Synchronization

You can save your calendar and contacts data in a remote Internet server. If you have saved data in the remote Internet server, you can synchronize your phone by starting the synchronization from your phone.

Note that answering an incoming call during synchronization will end the synchronization and you must start it again.

Synchronizing from your phone

Before synchronizing from your phone, you may need to do the following:

- Subscribe to a synchronization service. For more information on availability and the synchronization service settings, contact your

network operator or service provider.

- Retrieve the synchronization settings from your network operator or service provider.

You may receive the synchronization settings as a text message or you may have to key in the settings manually.

To start the synchronization from your phone:

- 1 Press **Menu**, then select *Extras*, *Synchronization*, and *Settings*, and select the connection settings you need for synchronization.

The synchronization settings may differ from the service settings required for WAP browsing. After synchronizing, change your **Settings** back to the previous ones if you want to use other WAP services later.

- 2 Mark the data to be synchronized.

See **Data to be synchronized** in [Key in synchronization settings manually](#).

- 3 Press **Menu**, and select *Connectivity*, *Synchronization* and *Synchronize*.

The marked data of the active set will be synchronized after confirmation.

Note that synchronizing for the first time may take time up to 30 minutes, if **Contacts** or **Calendar** are full.

Save synchronization settings received as text message

When you receive the synchronization settings as a text message, **Synchronization settings received** is displayed.

Press **Options** and select **Details** to view the received settings first, **Save** to save the synchronization settings, or **Discard** to discard them.

Key in synchronization settings manually

- 1 Press **Menu**, select *Connectivity*, *Synchronization*, and *Settings*.
- 2 Select *Custom. active Internet sync. sett.*

You need to activate the set where you want to save the synchronization settings. A set is a collection of settings required to make a connection to a service.

- 3 Scroll to the set you wish to activate and press **Activate**.
- 4 Select *Custom. active Internet sync. sett.*
- 5 Select each setting, one by one, and key in all the required settings.
 - *Settings' name*. Key in the name for the set and press **OK**.
 - *Data to be synchronized*. Mark the data you want to synchronize (**Contacts** or **Calendar**) and press **Done**.
 - *Database addresses*. Select **Contacts database** or **Calendar database** to be edited. Key in the name of the database and press **OK**.
 - *User name*. Key in the user name and press **OK**.
 - *Password*. Key in the password and press **OK**.
 - *Synchronization server*. Key in the name of the server and press **OK**.

Gallery (Menu 10)



You can save images and ringing tones, for example, that have been received in multimedia messages in the folders of the gallery. See [Read and reply to a multimedia message](#).

The gallery uses shared memory. See [Shared memory](#).

- 1 Press **Menu** and select **Gallery**. The list of options is shown.
- 2 Select **View folders** to open the list of folders.

Other available options are:

- **Add folder** to add a new folder. Key in a name for the folder and press **OK**.
- **Delete folder** to select the folder you want to delete. You cannot delete the original folders on the phone.
- **Rename folder** to select the folder you want to rename. You cannot rename the original folders on the phone.
- **Gallery downloads** to download more images and tones. Select **Image services** or **Tone services**, respectively. The list of available WAP bookmarks is shown. Select **More bookmarks** to access the list of WAP bookmarks in the **Services** menu, see [Use bookmarks](#).

Select the appropriate bookmark to connect to the desired WAP page. If the connection fails, you may not be able to access the WAP page from the WAP service whose connection settings are currently active. In this case, enter the [Services](#) menu and activate another set of service settings. Try again to connect to the WAP page.

For the availability of different WAP services, pricing and tariffs, contact your network operator and/or the WAP service provider.

- 3 Select the desired folder and the list of files in the folder is shown. [Graphics](#) and [Tones](#) are the original folders in the phone.
- 4 Scroll to the desired file. Press [Options](#) and the following options are available:

Tones

- [Open](#) to open the selected file.
- [Set as ring tone](#) to set the selected file as the ringing tone.
- [Details](#) to see the details of the file, for example the size of the file.
- [Sort](#) to sort the files and folders by date, type, name or size.

Graphics

- *Open* to open the selected file.
- *Delete* to delete the selected file.
- *Move* to move a file to another folder.
- *Rename* to give a new name to the file.
- *Set as wallpaper* to set the selected file as wallpaper.
- *Details* to see the details of the file, for example the size of the file.
- *Sort* to sort the files and folders by date, type, name or size.

Extras (Menu 11)



Note: Your phone must be switched on to use the functions in *Extras* menu. Do not switch the phone on when wireless phone use is prohibited or when it may cause interference or danger.

Calculator

The calculator in your phone adds, subtracts, multiplies, divides, counts the square and the square root and converts currency values.

This calculator has a limited accuracy and rounding errors may occur, especially in long divisions.

- 1 Press *Menu*, and select *Extras* and *Calculator*.
- 2 When '0' is displayed on the screen, key in the first number in the calculation.
- 3 Press *Options* and select *Add*, *Subtract*, *Multiply*, *Divide*, *Square*, *Square root* or *Change sign*.
- 4 Key in the second number.
- 5 For a total, press *Options* and select *Equals*. Repeat steps 3 to 5 as many times as is necessary.
- 6 To start a new calculation, first press and hold *Clear*.

Making a currency conversion

- 1 Press **Menu**, and select *Extras* and *Calculator*.
- 2 To save the exchange rate, press **Options** and select *Exchange rate*. Select either of the displayed options. Key in the exchange rate and press **OK**. The exchange rate remains in the memory until you replace it with another one.
- 3 To make the currency conversion, key in the amount to be converted, press **Options** and select *Foreign units in home units* or *Home units in foreign units*.



Note: You can also make the currency conversion in standby mode. Key in the amount to be converted, press **Options** and select *Foreign units in home units* or *Home units in foreign units*.

Voice recorder

The voice recorder allows you to record, save, and listen to telephone conversations and voice memos.



Note: Your phone must be switched on to use this function. Do not switch the phone on when wireless phone use is prohibited or when it may cause interference or danger.

Record a memo

- 1 Press **Menu**, *Extras* and *Voice recorder*.
Record appears highlighted.

- 2 To begin recording, scroll to *Record*, then press *Select*.
- 3 Clearly state your note; When you are finished, press *Stop*.
The *Title* box appears on the screen with the word *Recording*.
- 4 Key in a name for the recording and press *OK* to save it.
Recording saved appears on the screen.

If you do not want to save the recording, then follow these steps:

- 1 Press *Clear* to erase the name, then press *Back*.
Recording will not be not saved. Continue? appears on the screen.
- 2 Press *OK*.

Record a phone conversation



Note: Obey all applicable local laws governing recording of calls. Do not use this feature illegally.

- 1 Place the call.
- 2 While in the call, press *Options*.
- 3 Scroll to *Record*, then press *Select*.
While you are recording, the screen shows the amount of time left, and you hear a soft beep every 5 seconds.
- 4 When you are finished, press *Stop*.

- 5 *Recording saved* appears on the screen, and the conversation is automatically saved under the name "Recording." You can edit the name later.

Audio cues

There are three audio cues to indicate the recording status to both parties in an active phone conversation.

- The start tone plays when recording begins.
- The recording tone plays every 5 seconds while the conversation is being recorded.
- The ending tone signals the end of the recording.

Listen to or edit a memo

- 1 To listen to or edit a recorded memo, press **Menu**, *Extras*, *Voice recorder* and *Recordings list*. A list of recordings appears.
- 2 Scroll to the recording you want, then press **Options**.

A list of options appears:

- Select *Playback* to listen to the memo.
- Select *Edit title* to change the name of a memo. Key in the new name and press **OK**.
- Select *Erase* to delete the memo.

Set an alarm

You can set an alarm for a voice memo as a reminder to yourself.



Note: Voice memo alarms are played only when the phone is on. There is no snooze function.

- 1 Press **Menu**, *Extras*, *Voice recorder* and *Recordings list*.
- 2 Press **Options**, scroll to *Add alarm*, and press **Select**.
- 3 Enter the date and time for the alarm, then press **OK**.

Alarm added appears on the display.

Notes about voice memos

- Available memo length is about 180 seconds, but the maximum length of the memo depends on available memory.
- When the recording tone starts to beep every 2 seconds, you only have 10 seconds left for your voice memo.
- If the memory is full when you try to record a new voice memo, *No space for new recording* appears on the screen. You have the choice to erase an existing voice memo to free up space for the new recording.

Voice commands

In voice commands you can add a voice tag or recording of your voice to open menus, start applications, and call your voice mailbox. For example, you can add the voice command "record" to quickly start recording music.

Options available for voice commands include:

- **Profiles:** *Normal, Silent, Meeting, Outdoor, and Pager.*
- **Voice mailbox:** *Call voice mailbox*
- **Recorder:** *Record*
- **Call log:** *Missed calls, Received calls*
- **Music:** *Start music player, Radio on, Switch music off.*

Voice commands cannot be used while the phone is sending or receiving data over a GPRS connection.

Add a voice command to a menu function

- 1 Press **Menu** and select *Extras* and *Voice commands*.
- 2 Select one of the options, then select *Add command*. The screen displays *Press Start, then speak after the tone*. This is followed by a screen that says *Please speak now*.
- 3 Speak clearly and add a command such as "Call my voice mailbox".
- 4 If you speak too quietly, too long, or too short, a screen displays a message and asks if you want to try again. Press **OK** and **Start** again.
- 5 The symbol  is displayed when a voice command is saved to one of the options.



Note: All the voice commands are deleted if you insert another SIM card into the phone and save new voice commands.

Use the voice commands

- 1 After you have added your voice commands, you can use them by pressing and holding the right selection key .
- 2 The Start screen displays the message *Please speak now*.
Say the command you saved for the application you want to start, such as "Call my voice mailbox". The phone will automatically dial your voice mailbox, or select an application you set up in **Voice commands**.
- 3 If you are using a headset, press and hold the headset button until you hear a short tone. Then say the voice command clearly.

Play, change or delete a voice command

- 1 Press **Menu**, and select *Extras* and *Voice commands*.
- 2 Select the folder containing the desired function.
- 3 Scroll to function and press **Options**. Then select *Playback*, *Change*, or *Delete*.

Countdown timer

Press **Menu**, and select *Extras* and *Countdown timer*. Key in the alarm time in hours and minutes and press **OK**. If you wish, write your own note text which is displayed when the time expires, and press **OK** to start the countdown timer.

To change the countdown time, select *Change time*, or to stop the timer, select *Stop timer*.

If the alarm time is reached when the phone is in standby mode, the phone sounds a tone and flashes the note text if it is set or else *Countdown time up*. Stop the alarm by pressing any key. If no key is pressed, the alarm automatically stops within 30 seconds. To stop the alarm and to delete the note text, press **OK**.

Stopwatch

You can measure time, take intermediate times or lap times using the stopwatch. During timing, the other functions of the phone can be used. To set the timing in the background, press .



Note: Using the stopwatch consumes the battery and the phone's operating time will be reduced. Be careful not to let it run in the background when performing other operations with your phone.

Time observation and time splitting

- 1 Press **Menu**, and select *Extras*, *Stopwatch* and *Split timing*.

You can select *Continue* if you have set the timing in the background.

- 2 Press **Start** to start the time observation.

Press **Split** every time you want to take an intermediate time. The intermediate times are listed below the running time on the display. Scroll to view the times.

- 3 Press **Stop** to stop the time observation.

4 Press **Options** and select:

- **Start** to start the time observation again. The new time is added to the previous time.
- **Save** to save the time. Key in a name for the measured time and press **OK**. If no name is keyed in, the total time is used as a title.
- **Reset** to reset the time without saving it.

Lap times

Press **Menu**, and select **Extras**, **Stopwatch** and **Lap timing**. Press **Start** to start the time observation and **Lap** to take a lap time. Press **Stop** to stop the lap timing. Press **Options** and you can save or reset the lap times. Refer to [Time observation and time splitting](#) above.

Viewing and deleting times

Press **Menu**, and select **Extras**, and **Stopwatch**.

If the stopwatch is not reset, you can select **Show last** to view the latest measured time. Select **View times** and a list of names or final times of the time sets is shown, select the time set you want to view.

To delete the saved times, select **Delete times**. Select **All at once** and press **OK**, or select **One by one**, scroll to the times you want to delete, press **Delete** and press **OK**.

Memory card

This menu allows you to format a memory card, delete files from the memory card, and install Java applications saved on the memory card.

Only use memory cards that are compatible with your phone. Memory cards formatted from another device, or with information stored using another device may appear corrupted on your Nokia 3300 music phone.

You can use compatible memory cards with up to 128 MB. See [Remove and install the memory card](#).

If your memory card appears to be corrupted, and you have installed the Nokia Audio Manager PC software on a compatible computer, you may be able to repair the errors on the card with the Windows Error-checking tool. For more information about using this tool, refer to the information provided with your Windows operating system.

Formatting a memory card

Press Menu and select Extras, Memory card and Format memory card. Press **Yes** and confirm with the security code to start the formatting, or press **No** to cancel.

Formatting will automatically create the following folders on the memory card: Applications, Backup, Music, Recordings, Tones, and Track lists.



Important: When a memory card is formatted, all data on the card is permanently lost.

Delete files from a memory card

Press **Menu** and select *Extras*, *Memory card*, and *Delete file from memory card*.

Scroll to the folder containing the file that you want to delete and press **Open**. Scroll to the file, press **Options** and select *Delete*. Press **OK** to confirm the deletion.

Backup/Restore

You can back up and restore **Calendar** information, **Contacts**, and **Text messages** in the phone to a memory card, and restore the desired information from the memory card to the phone later. You can have only one backup copy of each type of information on the memory card. Regularly backing up all your personal data is recommended. Confirm that the backup is saved.



Note: You must have a memory card inserted in the phone to use this function. You must also have free memory on the memory card to back up information.



Warning: Do not connect your phone to a PC when backing up or restoring information. Connecting your phone to a PC will stop the backup and restore operations, leading to a loss of information.

Back up information to a memory card

- 1 Press **Menu** and select *Extras*, *Backup & Restore* and *Backup*.
 - To back up your *Calendar* information, *Contacts*, and *Text messages*, all at once, select *Backup all*.
 - To back up information individually, select *One by one*. Scroll to the information you want to back up and press **Mark**. When you have marked all the information you want to back up, press **Done**.
- 2 Press **Yes** to save the backup, or press **No** to cancel.

The backup folder is automatically created on the memory card if it does not already exist.



Important: Backing up information from the phone will also replace the corresponding information in the backup folder on the memory card.

Restore information from a memory card

- 1 Press **Menu** and select *Extras*, *Backup & Restore* and *Restore*.
- 2 Scroll to the information you want to restore and press **Mark**. When you have marked all the information you want to restore, press **Done**.
- 3 Press **Yes** to restore the information, or press **No** to cancel.



Important: Restoring information from a memory card will also replace the corresponding information in the phone.

Install Java applications

Press [Menu](#) and select [Extras](#), [Memory card](#), and [Install application](#). A list of Java applications saved in the Applications folder of the memory card is shown. Scroll to the application you want and press [Select](#).

All Java applications that you install from the memory card, including games, will be installed into the [Applications](#) menu. See [Launching an application](#).

Services (Menu 12)



Your phone has a built-in browser you can use to connect to selected services on the Internet. You can view weather reports, check news or flight times, view financial information, and much more.



Note: Your phone must be switched on to use this function. Do not switch the phone on when wireless phone use is prohibited or when it may cause interference or danger.

Notes on mobile internet access

This section gives a brief overview of mobile internet technology.

Technology background

XHTML

A technology called HyperText Markup Language (XHTML) is to mobile devices what the World Wide Web (WWW) is to personal computers. XHTML is a relatively new development that provides access to the Internet for mobile users.

Today, most XHTML sites are made up of text and hyperlinks. Some pages even contain low-resolution graphics, or require data input. Your service provider and others are free to design XHTML sites as they choose, so the sites are as variable as Web pages on the Internet.

Internet content on your personal computer is called a "web page." Internet content on your mobile phone is called a "page," or "XHTML card."

The wireless service provider's role

Because mobile internet content is designed to be viewed from your phone, your wireless service provider now becomes your "mobile internet service provider" as well.

Your wireless service provider has probably created a home page and set up your browser to go to this page when you log on to the Internet. Once at your service provider's home page, you may find links to a number of other sites.

Set up for browsing

It should not be necessary to manually configure the browser on your phone. Normally this is done by your wireless service provider once you have subscribed to the feature. Contact your wireless service provider if you have problems using the browser.

If it is necessary to enter the settings manually, refer to the following steps.

- 1 Press **Menu** and select *Services*, *Settings* and *Connection settings*.
- 2 Select *Active service settings*.

You need to activate the set where you want to save the service settings. A set is a collection of settings that are required to make a connection to a WAP service.

- 3 Scroll to the set that you would like to activate and press **Activate**.

4 Select *Edit active service settings*.

Select each of the settings one by one and key in all the required settings.

- *Settings' name* - Key in the new name for the connection set and press **OK**.
- *Homepage* - Key in the homepage address of the WAP service that you want to use, and press **OK**.
- *Session mode* - Select *Permanent* or *Temporary*.
- *Connection security* - Select **On** or **Off**.
- When the connection security is **On**, the phone tries to use a secure connection with the WAP service. If a secure connection is not available, the connection will not be made. If you wish to connect anyway, with a non-secure connection, you must set the connection security to **Off**.
- *Data bearer* - Select *GSM data* or *GPRS*.
- *Bearer settings* - Settings for the selected bearer. See below for more information.

For pricing, connection speed and other information, contact your network operator or service provider.

Settings when GSM data is the selected data bearer

- *Dial-up number* - Key in the phone number and press **OK**.
- *IP address* - Key in the address, and press **OK**. You obtain the IP address from your network operator or service provider.
- *Authentication type* - Select *Secure* or *Normal*.
- *Data call type* - Select *Analog* or *ISDN*.
- *Data call speed* - Select the speed you want to use, or select *Automatic*. *Automatic* is available only if the current selected data call type is *Analog*. The actual data call speed depends on the service provider.
- *Login type* - Select *Manual* or *Automatic*.
- *User name* - Key in the user name and press **OK**.
- *Password* - Key in the password and press **OK**.
- *Display terminal window* - Select **Yes**, if you want the server to perform user authentication when you access intranet sites during a dial-up connection.

Settings when GPRS is the selected data bearer

- *GPRS access point* - Key in the access point name and press **OK**.
- An access point name is needed to establish a connection to a GPRS network. You obtain the access point name from your network operator or service provider.
- *IP address* - Key in the address and press **OK**. You obtain the IP address

from your network operator or service provider.

- *Authentication type* - Select *Secure* or *Normal*.
- *Login type* - Select *Manual* or *Automatic*. If you select *Automatic*, the login type uses the user name and password keyed in the following settings. If you select *Manual*, the login information is required each time when establishing a connection.
- *User name* - Key in the user name and press **OK**.
- *Password* - Key in the password and press **OK**.

Sign on to the mobile internet

Press **Menu**, then select *Services* and *Home*. After a brief pause, your phone attempts to connect to your wireless service provider's home page.

Your phone connects to the Internet and to your service provider's home page. If you see the *Check service settings* message, the phone may not be set up for browsing. Contact your wireless service provider to make sure that your phone is configured properly.

Use browser options

The **Services** menu gives you the options shown in the following table. Some wireless service providers may have customized the options on the Services menu. Contact your wireless service provider for more information if any of the options shown in the following table are not available.

Choice	What it does
Home	Starts the browser and takes you to your service provider's home page.
Bookmarks	Shows a list of all saved bookmarks. Bookmarks help you find an XHTML site quickly.
Download links	Allows you to download content from pre-programmed XHTML sites.
Service inbox	Allows you to receive notifications from your service provider about new e-mail messages, changes in stock prices, and so on.
Settings	Provides options for changing connection settings, appearance settings, cookie settings, and certificates.
Go to address	Accepts an address you enter.

Choice	What it does
Clear the cache	Empties the browser's temporary memory. It is advisable to empty the cache at the end of each session.

Navigate the mobile internet

Since your phone screen is much smaller than a computer screen, mobile internet content is displayed differently than you may be accustomed to seeing. This section contains guidelines for using phone keys to navigate a XHTML site and examples of how to read an XHTML site.

General guidelines for using the phone keys

- Use the four-way scroll keys to browse the XHTML site.
- To select a highlighted item, press , the left selection key.
- To enter letters and numbers, use the messaging keyboard.
- To enter special characters, press the  key, then the  key.

Examples of mobile internet sites

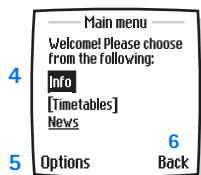
The following illustrations show most of the elements you may find on a mobile internet site. These are examples only.



1 **Header line**: shows the current mobile internet site.

2 **Active link**: appears as a highlighted word.

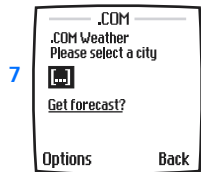
3 **Inactive link**: appears as an underlined word.



4 **Selection list**: Brackets [] appear when you have the option to enter information.

5 **Options**: Press **Options** to go to the site menu and/or browser page.

6 **Back**: Press **Back** to return to the previous page.



7 **Data entry field**: Brackets [] that enclose dots indicate when you need to enter information. In this example, you can enter your zip code to receive the local weather forecast.

Use bookmarks

You can save addresses for your favorite sites as bookmarks. A bookmark helps you find a site again, just as a slip of paper helps you find a page in a book. You can add up to 50 bookmarks to your browser.

Set a bookmark while browsing

- 1 Press **Menu**, then select **Services** and **Bookmarks**. After a brief pause, a list of bookmarks (if any) appear in the display.
- 2 Press **Options**, scroll to **New bookmark** (if necessary), and press **Select**.
- 3 Enter an address for the bookmark and press **OK**.
- 4 Enter a title for the bookmark and press **OK**. A message appears in the display confirming your bookmark is saved.

Disconnect from the mobile internet

- To quit browsing and end the connection, press **Options** and select **Quit**. When the **Quit browsing?** message appears, press **Yes**.
OR
- Press . If **GSM data** is the selected data bearer, then press  twice.

Security issues

Security features are required for some WAP services, such as banking services or shopping on a WAP site. For such connections you need security certificates and possibly a security module, which may be available on your SIM card.

The security module can contain certificates as well as private and public keys. The security module provides security services for WAP- related applications and allows you to use a digital signature. The certificates are saved in the security module by the service provider, or they can be downloaded from a WAP site. For more information, contact your service provider.

Clear the cache

The information or services you have accessed are stored in the cache of your phone. A cache is a buffer memory, which is used to store data temporarily. If you tried to access or have accessed confidential information requiring passwords (for example, your bank account), empty the cache of your phone after each use.

- 1 Press **Menu**, then select **Services**. After a brief pause, a list of options appear in the display.
OR
If browsing, press **Options**.
- 2 Scroll to **Clear the cache** and press **Select**.

About authority certificates

To use some XHTML services, such as banking services, you need an authority certificate. Using the certificate can help you to improve the security of connections between your phone and an XHTML server.

You can download the certificate from an XHTML page if the XHTML service supports the use of authority certificates. After the download, you can view the certificate, then save or delete it. If you save the certificate, it is added to the list of certificates in the phone.

Your phone alerts you if the identity of the XHTML server or XHTML gateway cannot be verified or is not authentic.

View the list of authority certificates

- 1 Press **Menu**, then select *Services*, *Settings* and *Connection settings*.
- 2 Scroll to *Security settings* and press **Select**.
- 3 *Scroll to Authority certificates* and press **Select**.
- 4 Scroll to *Certificate list* and press **Select**. The list of authority certificates is displayed.

SIM services (Menu 13)



In addition to the functions available on the phone, your SIM card may provide additional services that you can access in menu 13. Menu 13 is shown only if it is supported by your SIM card. The name and contents of the menu depend entirely on the service available.

For availability, rates and information on using SIM services, contact your SIM card vendor, e.g. network operator, service provider or other vendor.

You can set the phone to show you the confirmation messages sent between your phone and the network when you are using the SIM services by selecting the option **Yes** within the menu *Confirm SIM service actions*.

Note that accessing these services may involve sending a text message (SMS) or making a phone call for which you may be charged.

Instant Messaging (Menu 14)



Note: Since Instant Messaging (IM) may not be available from your wireless service provider, the **IM** screen may not appear. Contact your service provider for details and availability.

You can now take text messaging to the next level by experiencing IM in a wireless environment. You can engage in IM with friends and family, regardless of the mobile system or platform (like the Internet) they are using. It is different from using SMS or e-mail addresses to send messages because you can have a true, two-way conversation. The contact list feature shows you when your friends, family members, and colleagues are online and available to exchange instant messages. Simply select the name, write the message, and send it. Your message stays on the screen and when your friend/family/colleague replies, the reply appears on the screen, above your original message, so you can track the conversation.

Before you can start using IM, you must first subscribe to the text messaging service and get a user name and password from your service provider.

Log into service

The first time you use IM, you will need to enter the user name and password provided by your service provider to log into the service. After the first login, you will not have to enter your user name again.

To log in for the first time, perform the following steps:

- 1 Press **Menu** and scroll to *IM*, Menu 14. Press **Select** and *Opening application* appears.
- 2 From the IM menu, scroll to *Active network* and select the network to which you want to connect.
- 3 From the IM menu, scroll to *Login* and press **Select**. *The User ID:* screen appears.
- 4 Enter your user name, press **Options**, then select **OK**.
The *Password* screen appears.
- 5 Enter your password, press **Options**, then select **OK**.
Logging in appears briefly.
- 6 Press **Yes** to allow web access.
Logging in appears again briefly, followed by *Logged in* and the **IM** menu.

You can use automatic login after you have set up your user name and password. See [Set up automatic login](#) for information on setting up automatic login.

Set your availability

You can determine if other users can tell whether you are available or not. To set your availability, perform the following steps:

- 1 From the **IM** menu, scroll to *Availability*, and press **Select**.

- 2 Scroll to one of the following options, then press **Select**:

Available: others see your status as online and you receive availability information and messages from others.

Do not disturb: even though others see your status as online, you do not receive availability information and messages from others.

Appear offline: even though others see your status as offline, you receive availability information and messages from others.

Instant messages

You can send instant messages to any other instant message participant if you have the person's user name. You can add that person to your contact list during an instant messaging session. See *Add a new contact during instant messaging* for instructions.

Write and send instant messages

- 1 From the **IM** menu, scroll to *My contacts* and press **Select**.
- 2 Press **Options**; then scroll to *Write message* and press **Select**.
The *User ID* screen appears.
- 3 Enter the user name of the person to whom you want to send an instant message.
- 4 Press **Options**, and select **OK**.

The message view appears with the recipient's name inside the input window.

- 5 Press **Options**, select *Write message* and enter a message.
- 6 Press **Options**, then select *Send*.

Receive and reply to instant messages

When you receive an instant message, a screen appears, showing that you have a new instant message with the name of the sender.

- 1 Press **Open**, then press **Options**.
- 2 Select *Write message*, and enter a message.
- 3 Press **Options**, then select *Send*.

Chat sessions

If you want to chat with a person, you must first add that person to the contact list. See [Add a new contact to contact list](#) for instructions.

Chat session from the contact list view

- 1 From the **IM** menu, scroll to *My contacts* and press **Select**.
- 2 Scroll to the contact with whom you want to chat.
- 3 Press **Options** and select *Chat*.
- 4 Press **Options**, select *Write message*, and enter a message.
- 5 Select *Send*.

The conversation view appears with the contact's name inside the input window.

- 6 After your contact replies, repeat steps 4–5 to continue your chat session.

Chat session from the inbox view

You can only initiate a chat session from this view, if an active chat is open or has been saved. See [Save chat history](#) for information on saving chat sessions.

- 1 From the **IM** menu, scroll to *Inbox* and press **Select**.
- 2 Scroll the contact with whom you want to chat.
- 3 Press **Options** and select *Chat*.
- 4 Press **Options**, select *Write message*, and enter a message.
- 5 Select *Send*.

The conversation view appears with the contact's name inside the input window.

- 6 After your contact replies, repeat steps 4–5 to continue your chat session.

Quit chat session

If you want to end your chat session, perform the following steps:

- 1 From the conversation view, press **Back**, then press **Options**.
- 2 Scroll to *End convers.* and press **Select**.

Conversation ended appears.

Save chat history

If you want to save your chat session (chat history), perform the following steps:

- 1 From the Conversation view, press **Options**, then select **Save**.

The *Conversation name*: screen appears.

- 2 Enter the name you want to use for the conversation and press **Options**.
- 3 Select **Save**.

Conversation saved appears.

View chat history

- 1 From the **IM** menu, scroll to *Saved convers.* and press **Select**.
- 2 Scroll to the chat history you want to view, then press **Select**.

Rename chat history

- 1 From the Instant messaging menu, scroll to *Saved convers.*, and press **Select**.
- 2 Scroll to the chat history you want to rename, then press **Select**.
- 3 Press **Options**, then select *Rename*.

Press **Clear** as many times as necessary to delete the current chat history name.

- 4 Press **Options**, then select **OK**.

Conversation renamed appears.

Delete chat history

- 1 From the **IM** menu, scroll to *Saved convers.*, and press **Select**.
- 2 Scroll to the chat history you want to rename, then press **Select**.
- 3 Press **Options**, then select *Delete*.

Conversation deleted appears.

Contacts

You can add the names of your friends and family with whom you will be interacting frequently using instant messaging to your contact list.

Add a new contact to contact list

- 1 From the **IM** menu, scroll to *My contacts* and press **Select**.
- 2 Press **Options**, then select *Add contact*.
The *User ID:* screen appears.
- 3 Enter the contact's user name, press **Options**, then select **OK**.
The *Nickname:* screen appears.

- 4 Enter the contact's nickname, press **Options**, then select **OK**.

Updating information appears briefly, then *Added to IM contacts* appears.

Add a new contact during instant messaging

- 1 From the Conversation view, press **Options**.

- 2 Scroll to *Add* and press **Select**.

The *User ID:* screen appears, with the contact's user name displaying.

- 3 Press **Options**, then select **OK**.

The *Nickname:* screen appears, with the contact's nickname displayed. If you want to change the nickname, press **Clear** as many times as necessary to delete the nickname.

- 4 Press **Options**, then select **OK**.

Updating information appears briefly, then *Added to IM contacts* appears.

Search for a contact

- 1 From the **IM** menu, scroll to *My contacts* and press **Select**.

- 2 Press **Options**, then select *Search*.

- 3 Scroll to one of the following options, then press **Select**:

Screen name: Enter the first few characters of the contact's screen name, press **Options**, then select **Search**.

User ID: Enter the first few characters of the contact's user name, press **Options**, then select **Search**.

Phone number: Enter the first few numbers of contact's phone number, press **Options**, then select **Search**.

E-mail: Enter the first few characters of the contact's e-mail address, press **Options**, then select **Search**.

Remove a contact from contact list

- 1 From the **IM** menu, scroll to **My contacts** and press **Select**.

- 2 Scroll to the contact name you want to remove.

- 3 Press **Options**, then select **Remove contact**.

A message appears, asking if you want to remove the contact.

- 4 Press **OK**.

Updating information appears briefly, followed by a confirmation note.

Block messages from a contact

- 1 From the **IM** menu, scroll to **My contacts** and press **Select**.

- 2 Scroll to the contact from whom you want to block messages.

- 3 Press **Options**, then select **Block contact**.

A message appears, asking if you want to block messages from the contact.

- 4 Press **OK**.

Updating information appears briefly, followed by a confirmation note.

Unblock messages from a contact

- 1 From the **IM** menu, scroll to *My contacts* and press **Select**.

- 2 Scroll to the contact from whom you want to unblock messages.

Press **Options**, then select *Unblock*.

A message appears, asking if you want to unblock messages from the contact.

- 3 Press **OK**.

Updating information appears briefly, followed by a confirmation note.

Set an alert for a contact

You can set an alert to a contact to notify you when the contact's availability changes.

- 1 From the **IM** menu, scroll to *My contacts* and press **Select**.

- 2 Scroll to the contact for whom you want to set an alert.

- 3 Scroll to *Set alert* and press **Select**.

Alert set appears.

Private groups

You can create your own private chat groups. The participants must be entered in your contact list. See [Contacts](#) for more information.

Create private chat group

1 From the **IM** menu, scroll to *Create group* and press **Select**.

2 The *Group name:* screen appears.

3 Enter the group's name and press **Options**.

You can enter up to 10 characters for the group name.

4 Select **OK**.

Your screen name appears.

5 Press **Options**, then select **OK**.

Updating information appears briefly, then a confirmation note appears, followed by the Conversation view appearing with the group's name inside the input window.

Add members to private group chat

- 1 From the group's Conversation view, press **Options**.
- 2 Scroll to *Group members* and press **Select**.
- 3 Press **Send invitation**.
- 4 Scroll to the contact you want to invite to the group chat and press **Select**

The *Invitation:* screen appears.

- 5 Enter the invitation text, press **Options**, then press **Send**.

A confirmation note appears, then the group list displays.

- 6 To add other members to the group, repeat steps 3-5.

Remove private group members

- 1 From the group list, scroll to the member you want to remove.
- 2 Press **Back**, then press **Options**.
- 3 Scroll to *Remove memb.* and press **Select**.

A message appears, asking you if you want to remove the member.

- 4 Press **OK**.

Updating information appears briefly, then a confirmation note appears.

Save a private group

- 1 From the group's Conversation view, press **Options**.

- 2 Scroll to *Save* and press **Select**.

The *Conversation name*: screen appears.

- 3 Enter the name you want to use for the group and press **Options**.

- 4 Select *Save*.

Conversation saved appears.

Invitations to group chat

Accept invitations to group chat

- 1 From the **IM** menu, scroll to *Inbox*.

- 2 Scroll to the group invitation you want to accept and press **Options**.

- 3 Scroll to *Open*, then press **Select**.

- 4 The *New invitation received* screen appears, with the user name of the invitation sender displaying.

- 5 Press **Accept**.

The *Screen name*: screen appears, with your screen name displaying.

- 6 Press **Options**, then select **OK**.

Updating information appears briefly, then a confirmation note appears,

Reject invitations to group chat

- 1 From the **IM** menu, scroll to *Inbox*.
- 2 Scroll to the group invitation you want to reject and press **Options**.
- 3 Scroll to *Open*, then press **Select**.

The *New invitation received* screen appears, with the user name of the invitation sender displaying.

- 4 Press **Reject**.

Invitation rejected appears.

Instant messaging settings

You can customize your instant messaging settings. After you open instant messaging, scroll to **Settings** and press **Select**. The following options appear in the display.

Option	What it does
Settings	Allows you to change your User ID , Password , GPRS address , SMS number , Bearer , and Service name .
Screen name	Allows you to change your screen name.
Auto login	Allows you to set your login to the automatic state.
Contact ordering	Allows you to display your contacts by either Alphabetic or By status order.
Availability	Allows you to update your contacts' online availability (presence) by using the Updates option or to display how your presence is seen by other users by using the Authorization option.

Set up screen name

You can set up or revise a screen name that is 1–20 characters in length.

You must enter at least one character for your screen name. A blank screen name is not allowed. You must have a screen name to be able to join a group chat.

- 1 From the **IM** menu, scroll to *Settings* and press **Select**.

Scroll to *Screen name*, then press **Select**.

The *Screen name:* screen appears.

- 2 Enter your screen name, press **Options**, then select **OK**.

Screen name saved appears.

Set up automatic login

You can use automatic login after you have logged with the user name and password provided by your service provider.

- 1 From the **IM** menu, scroll to *Settings* and press **Select**.
- 2 Scroll to *Auto login*, press **Select** and select *On IM start-up*.

Set up contacts order

- 1 From the **IM** menu, scroll to *Settings* and press **Select**.
- 2 Scroll to *Contact ordering*, then press **Select**.
- 3 Select either *Alphabetic* or *By status*, then press **Select**.

Set up presence status and authorization

Presence allows you and other users to know who is online and available to chat. You can set your phone to automatically update a contact's presence status every time it is changed. To set the presence status to an automatic update state, perform the following steps:

- 1 From the **IM** menu, scroll to *Settings* and press **Select**.
- 2 Scroll to *Availability*, press **Select**, then select *Updates*.
- 3 Scroll to *On*, then press **Select**.

To set your presence authorization, perform the following steps:

- 1 From the **IM** menu, scroll to *Settings* and press **Select**.
- 2 Scroll to *Availability*, press **Select**, then select *Authorization*.
- 3 Select either *My contacts* or *All*, then press **Select**.

A confirmation note appears.



Note: If you select *My contacts*, only the contacts in your contact list can view your presence information. If you select *All*, anybody can view your presence information.

Log off service

Logging off of **IM** signs off and terminates the connection. If you just exit, the connection is terminated, but you don't have to log in again the next time you connect to IM.

Exit instant messaging

- 1 Press **Back** until *Closing application* appears, then the **IM** main menu screen appears.
- 2 Press **Exit**.
If you open **IM** again, you do not need to login again.

Log out of instant messaging

- 1 From the **IM** menu, scroll to *Logout* and press **Select**.
Logout and end all chat sessions? appears.
 - 2 Press **OK**
 - 3 *Logging out* appears, followed by a confirmation note.
 - 4 If you want to exit **IM**, follow steps 1–2 under Exit instant messaging.
-  **Note:** Even though you have logged out, you still must exit **IM**, if you want to end your instant messaging session.

8. Reference information

Battery statements

Charging and Discharging

Your phone is powered by a rechargeable battery.

Note that a new battery's full performance may be achieved only after two or three complete charge and discharge cycles!

The battery can be charged and discharged hundreds of times but it will eventually wear out. When the operating time (talk time and standby time) is noticeably shorter than normal, it is time to buy a new battery.

Use only batteries approved by the phone manufacturer and recharge your battery only with the chargers approved by the manufacturer. Unplug the charger when not in use. Do not leave the battery connected to a charger for longer than a week, since overcharging may shorten its lifetime. If left unused, a fully charged battery will discharge itself over time.

Temperature extremes can affect the ability of your battery to charge; allow it to cool down or warm up first.

Use the battery only for its intended purpose.

Never use any charger or battery which is damaged or worn out.

Do not short-circuit the battery. Accidental short-circuiting can occur when a metallic object (coin, clip, or pen) causes direct connection of the + and - terminals of the battery (metal strips on the battery), 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 59°F and 77°F (15°C and 25°C). A phone with a hot or cold battery may temporarily not work, even when the battery is fully charged. Batteries' performance is particularly limited in temperatures well below freezing.

Do not dispose of batteries in a fire!

Dispose of batteries according to applicable local regulations (for example, recycling). Do not dispose of as household waste.

Use proper care and maintenance

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

- Keep the phone and all its parts and accessories out of the reach of small children.
- Keep the phone dry. Precipitation, humidity and all types of liquids or moisture can contain minerals that will corrode electronic circuits.

- Do not use or store the phone in dusty, dirty areas. Its moving parts can be damaged.
- Do not store the phone in hot areas. High temperatures can shorten the life of electronic devices, damage batteries, and warp or melt certain plastics.
- Do not store the phone in cold areas. When it warms up (to its normal temperature), moisture can form inside which may damage electronic circuit boards.
- Do not attempt to open the phone. Nonexpert handling may damage it.
- Do not drop, knock, or shake the phone. Rough handling can break internal circuit boards.
- Do not use harsh chemicals, cleaning solvents, or strong detergents to clean the phone.
- Do not paint the phone. Paint can clog the moving parts and prevent proper operation.
- Use only the supplied or an approved replacement antenna. Unauthorized antennas, modifications, or attachments could damage the phone and may violate regulations governing radio devices.

All of the above suggestions apply equally to your phone, battery, charger or any accessory. If any of them are not working properly, take them to your nearest qualified service facility. The personnel there will assist you, and if necessary, arrange for service.

Understand important safety information

Traffic Safety

Do not use a handheld device while driving a vehicle. Always secure the phone in its holder; do not place the phone on the passenger seat or where it can break loose in a collision or sudden stop.

Remember road safety always comes first!

Operating environment

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

Use the phone only in its normal operating positions.

Parts of the phone are magnetic. Metallic materials may be attracted to the phone, and persons with a hearing aid should not hold the phone to the ear with the hearing aid. Always secure the phone in its holder, because metallic materials may be attracted by the earpiece. Do not place credit cards or other magnetic storage media near the phone, because information stored on them may be erased.

Electronic devices

Most modern electronic equipment is shielded from radio frequency (RF) signals. However, certain electronic equipment may not be shielded against the RF signals from your wireless phone.

Pacemakers

Pacemaker manufacturers recommend that a minimum separation of approximately 15.3 inches be maintained between a handheld wireless phone and a pacemaker to avoid potential interference with the pacemaker. These recommendations are consistent with the independent research by and recommendations of Wireless Technology Research. Persons with pacemakers:

- Should always keep the phone more than 15.3 inches from their pacemaker when the phone is switched on
- Should not carry the phone in a breast pocket
- Should use the ear opposite the pacemaker to minimize the potential for interference.
- If you have any reason to suspect that interference is taking place, switch off your phone immediately.

Hearing aids

Some digital wireless phones may interfere with some hearing aids. In the event of such interference, you may want to consult your service provider.

Other medical devices

Operation of any radio transmitting equipment, including cellular phones, may interfere with the functionality of inadequately protected medical devices. Consult a physician or the manufacturer of the medical device to determine if they are adequately shielded from external RF energy or if you have any questions. Switch off your phone 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.

Vehicles

RF signals may affect improperly installed or inadequately shielded electronic systems in motor vehicles (for example, electronic fuel injection systems, electronic antiskid/antilock braking systems, electronic speed control systems, air bag systems). Check with the manufacturer or its representative regarding your vehicle. You should also consult the manufacturer of any equipment that has been added to your vehicle.

Posted facilities

Switch your phone off in any facility where posted notices so require.

Potentially explosive atmospheres

Switch off your phone when in any area with a potentially explosive atmosphere and obey all signs and instructions. Sparks in such areas could cause an explosion or fire resulting in bodily injury or even death.

Users are advised to switch off the phone when at a refueling point (service station). Users are reminded of the need to observe restrictions on the use of radio equipment in fuel depots (fuel storage and distribution areas), chemical plants, or where blasting operations are in progress.

Areas with a potentially explosive atmosphere are often but not always clearly marked. They include below deck on boats; chemical transfer or storage facilities; vehicles using liquefied petroleum gas (such as propane or

butane); areas where the air contains chemicals or particles, such as grain, dust, or metal powders; and any other area where you would normally be advised to turn off your vehicle engine.

Vehicles

Only qualified personnel should service the phone or install the phone in a vehicle. Faulty installation or service may be dangerous and may invalidate any warranty which may apply to the unit.

Check regularly that all wireless phone 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 phone, its parts, or accessories.

For vehicles equipped with an air bag, remember that an air bag inflates with great force. Do not place objects, including both 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 phone while in the air is prohibited. Switch off your phone before boarding an aircraft. The use of wireless telephones in an aircraft may be dangerous to the operation of the aircraft, disrupt the wireless telephone network, and may be illegal.

FCC regulations prohibit using your phone while in the air. Switch off your phone before boarding an aircraft. The use of wireless telephones in an aircraft may be dangerous to the operation of the aircraft, disrupt the wireless telephone network, and may be illegal.

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

Emergency calls



Important: This phone, like any wireless phone, operates using radio signals, wireless, and landline networks as well as user-programmed functions. Because of this, connections in all conditions cannot be guaranteed. Therefore you should never rely solely upon any wireless phone for essential communications (for example, medical emergencies).



Important: To make a call on the Nokia 3300 music phone, you must first disconnect or remove the DKU-2 data cable, if it is connected to a computer.

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

To make an emergency call:

- 1 If the phone is not on, switch it on. Check for adequate signal strength.
- 2 Remove the DKU-2 data cable, if it is connected.
- 3 Press  key as many times as needed (for example, to exit a call, to exit a menu, etc.) to clear the display and ready the phone for calls.
- 4 Key in the emergency number for your present location (for example, 911 or other official emergency number). Emergency numbers vary by location.
- 5 Press the  key.

If certain features are in use, you may first need to turn those features off before you can make an emergency call. Consult this user guide and your local service provider.

When making an emergency call, remember to give all the necessary information as accurately as possible. Remember that your wireless phone 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 MODEL PHONE MEETS THE GOVERNMENT'S REQUIREMENTS FOR EXPOSURE TO RADIO WAVES.

Your wireless phone is a radio transmitter and receiver. It is designed and manufactured not to exceed the emission limits for exposure to radio frequency (RF) energy set by the Federal Communications Commission of the U.S. Government. These limits are part of comprehensive guidelines and establish permitted levels of RF energy for the general population. The guidelines are based on standards that were developed by independent scientific organizations through periodic and thorough evaluation of scientific studies. The standards include a substantial safety margin designed to assure the safety of all persons, regardless of age and health.

The exposure standard for wireless mobile phones employs a unit of measurement known as the Specific Absorption Rate, or SAR. The SAR limit set by the FCC is 1.6W/kg.* Tests for SAR are conducted using standard operating positions accepted by the FCC with the phone transmitting at its highest certified power level in all tested frequency bands. Although the SAR is determined at the highest certified power level, the actual SAR level of the phone while operating can be well below the maximum value. This is because the phone is designed to operate at multiple power levels so as to use only the power required to reach the network. In general, the closer you are to a wireless base station antenna, the lower the power output.

Before a phone model is available for sale to the public, it must be tested and certified to the FCC that it does not exceed the limit established by the government-adopted requirement for safe exposure. The tests are performed in positions and locations (for example, at the ear and worn on the body) as required by the FCC for each model. The highest SAR value for this model phone as reported to the FCC when tested for use at the ear is 0.62 W/kg, and when worn on the body, as described in this user guide, is 0.87 W/kg. (Body-worn measurements differ among phone models, depending upon available accessories and FCC requirements).

While there may be differences between the SAR levels of various phones and at various positions, they all meet the government requirement.

The FCC has granted an Equipment Authorization for this model phone with all reported SAR levels evaluated as in compliance with the FCC RF exposure guidelines. SAR information on this model phone is on file with the FCC and can be found under the Display Grant section of

<http://www.fcc.gov/oet/fccid> after searching on FCC ID OW3NEM-2.

For body worn operation, this phone has been tested and meets the FCC RF exposure guidelines for use with an accessory that contains no metal and that positions the handset a minimum of 5/8 inch (1.5 cm) from the body. Use of other accessories may not ensure compliance with FCC RF exposure guidelines. If you do not use a body-worn accessory and are not holding the phone at the ear, position the handset a minimum of 5/8 inch (1.5 cm) from your body when the phone is switched on.

*In the United States and Canada, the SAR limit for mobile phones used by the public is 1.6 watts/kilogram (W/kg) averaged over one gram of tissue. The standard incorporates a substantial margin of safety to give additional protection for the public and to account for any variations in measurements. SAR values may vary depending on national reporting requirements and the network band. For SAR information in other regions please look under product information at www.nokia.com.

Use enhancements safely

A few practical rules for enhancements operation:

- Keep all enhancements out of the reach of small children.
- When you disconnect the power cord of any accessory, grasp and pull the plug, not the cord.
- Check regularly that any vehicle-installed enhancements are mounted and are operating properly.
- Installation of any complex car enhancements must be made by qualified personnel only.
- Use only batteries, chargers, and enhancements that have been approved by the phone manufacturer. The use of any other types could invalidate any approval or warranty applying to the phone and could be dangerous.

Frequently asked questions

This section lists answers to the most frequently asked questions. Some of the answers contain menu shortcuts.

Q. What is my security code?

- A. The default security code is 12345. However, Nokia recommends that you change this code immediately. Certain features can be used only after the correct security code has been successfully entered.

Q. How do I lock and unlock the keypad?

- A. Lock the keypad by pressing **Menu** . To unlock the keypad, press **Unlock** .

Q. How do I make the phone ring louder?

- A. Press **Menu 4 (Profiles)**, and scroll through the list of profiles until you find the one for which you want to set the ringing volume. Then press **Select**.
- Scroll to **Customize** and press **Select**.
 - Scroll to **Ringing volume** and press **Select**.
 - Scroll to the volume level of your preference and press **Select**.

Q. How do I change the ringing tone?

- A. Press **Menu 4 (Profiles)** and scroll through the list of profiles until you find the one for which you want to set the ringing tone. Then press **Select**.

- Scroll to **Customize** and press **Select**.
- Scroll to **Ringing tone**, and then press **Select**.
- Scroll through the options. After you hear the tone you want to use, press **Select**.

Q. How do I store my voice mailbox number?

- A. Press **Menu 0-1-4-2** (**Messages > Voice messages > Voice mailbox number**). Enter your voice mailbox phone number, and press **OK**.

Q. How do I call my voice mailbox number (retrieve voice messages)?

- A. When your phone alerts you to new voice messages, press **Listen** and follow the instructions on the phone. If you'd rather listen to your messages later, press **Exit**.

To listen to your voice messages at a later time, perform one of the following actions:

- Press and hold **1**.
- Press **Menu 0-1-4-1** (**Messages > Voice messages > Listen to voice messages**). Follow the recorded voice prompts to listen to your messages.

Q. How do I redial the last-dialed number?

- A. Press  twice.

Q. How do I assign a key to 1-touch dialing?

- A. Press **Contacts** and scroll to **1-touch dialing**.

Press **Select**.

Scroll to the first (empty) slot and press **Assign**.

Enter or retrieve the name/number you want to assign to the key and press **OK**. Repeat these steps as many times as necessary.

Q. How do I check the memory status?

- A. Press **Contacts**, scroll to **Settings**, and press **Select**. Scroll to **Memory status** and press **Select**. Scroll to Phone or SIM card and press **Select**. The memory status for your selection appears in the display.

Q. How do I find my phone's Model number and IMEI number?

- A. The model number is located under the battery and the memory card. The IMEI number is located on a label under the phone's back cover. Turn your phone off and remove the back cover. The IMEI label is located on the right side, above the battery.

Q. How do I clear my call timers?



Important: Clearing call timers cannot be undone.

- A. Press **Menu 2-5-5 (Call log - Call timers - Clear timers)**. When the security code prompt appears, enter your security code and press **OK**.

Glossary

Business card	A business card is the same as an entry in Contacts . It may contain a name, phone number, and text entry. It can also be sent to other devices.
Call forwarding	A network services feature you use to forward incoming calls to another number.
Call lists	A list used to track numbers for incoming, outgoing, or missed calls.
Call log	A log that registers information about calls you make and receive.
Call timers	Timers used to track the amount of time you spend on calls.
Call waiting	A network services feature that enables your phone to beep while you are in the middle of a call. The beep lets you know that someone else is calling you.
IMEI	The identification number that is assigned to the phone. This number is located under the back cover, on the right.
In-call options	Features available for use while you are in a call.
Keypad	Locks the keypad to prevent accidental key presses.
Keypad tones	The tone you hear when you press a key.

Menu	A list of choices you can make to change settings on your phone or use various phone features.
Profile	A group of settings you can use to customize the way your phone works.
Quick save	A fast method for saving a number.
Ringling tone	The sound your phone makes when you receive a call. Ringing tones can be ringing sounds or short tunes.
Scroll bar	A bar that appears on the right side of the screen when you scroll through the main menus.
SMS	The quick way to say short message service.
Start screen	Your phone's idle screen.
Voice mail	A network services feature that enables people who call and miss you to leave a voice message on your phone.
Warning tones	Sounds your phone makes during error conditions, during confirmations, when the battery is low, and when you need to recharge the battery.

Technical information

Feature	Specification
Weight	4.41 oz (125 g) with BLD-3 780 mAh Li-Ion battery
Size	4.35 in W x 2.48 in H x 0.79 in T (115 mm W x 63 mm H x 20 mm T)
Frequency range	Lowband 824 - 849 MHz (TX) 869 - 894 MHz (RX) Highband 1850 - 1910 MHz (TX) 1930 - 1990 MHz (RX)
Transmitter output power	850 MHz up to 2 W, 33 dBm 1900 MHz up to 1 W, 30 dBm
Battery voltage	4.0 V nominal
Operating temperature	Phone -4°F to + 131°F (-20°C to + 55°C) Radio 14°F to + 131°F (-10°C to + 55°C)

Feature	Specification
Number of channels	Lowband CH 128 - 251 = 124 channels CH 512 - 810 = 299 channels
Talk time/standby time	Talk time = 2.5 hours Standby time = 230 hours

Battery talk and standby times are estimates only and depend on signal strength, network conditions, features used, battery age and condition (including the effect of charging habits), temperatures to which battery is exposed, use in digital mode, and many other factors. Please note that the amount of time a phone is used for calls will affect its standby time. Likewise, the amount of time that the phone is turned on and in standby mode will affect its talk-time.

Troubleshooting

The following table lists some common problems and their solutions.

Problem	Possible cause	Possible solution
My phone is not charging	The charger and phone are not properly connected	Securely connect the charger to the phone
	The charger is not properly plugged into the wall	Ensure the charger is plugged in correctly
My phone is not making/receiving calls	The battery is not charged	Charge the battery
	The signal strength is poor	If you are indoors, move toward a window
I cannot listen to my voice messages	You do not have voicemail service	Call your wireless service provider
	You have not setup your voicemail service with your wireless service provider	Call your wireless service provider
	You have not saved your voicemail number to your phone	See Voice messages
	You have forgotten your password or are entering it incorrectly	Call your wireless service provider
	The voicemail number you have saved to your phone is incorrect	Call your wireless service provider

Problem	Possible cause	Possible solution
When I insert my SIM card into another phone, it's rejected	Fixed dialing is activated on your SIM card and the receiving phone doesn't support fixed dialing	Deactivate fixed dialing on the SIM
I cannot hear the music player or radio.	A proper enhancement (headset or music stand) is not connected to the phone. You have not installed Nokia Audio Manager. You have not stored music on a memory card. No radio frequencies are saved in memory. Volume needs adjustment.	Connect the proper enhancement. See Install Nokia Audio Manager, Listening to music and Tune a radio station. See Understand your phone to locate the volume key.

Nokia ONE-YEAR LIMITED WARRANTY

Nokia Inc. ("Nokia") warrants that this cellular device ("Product") is free from defects in material and workmanship that result in Product failure during normal usage, according to the following terms and conditions:

- 1 The limited warranty for the Product extends for ONE (1) year beginning on the date of the purchase of the Product. This one year period is extended by each whole day that the Product is out of your possession for repair under this warranty.
- 2 The limited warranty extends only to the original purchaser ("Consumer") of the Product and is not assignable or transferable to any subsequent purchaser/end-user.
- 3 The limited warranty extends only to Consumers who purchase the Product in the United States of America.
- 4 During the limited warranty period, Nokia will repair, or replace, at Nokia's sole option, any defective parts, or any parts that will not properly operate for their intended use with new or refurbished replacement items if such repair or replacement is needed because of product malfunction or failure during normal usage. No charge will be made to the Consumer for any such parts. Nokia will also pay for the labor charges incurred by Nokia in repairing or replacing the defective parts. The limited warranty does not cover defects in appearance, cosmetic, decorative or structural items, including framing, and any non-operative parts. Nokia's limit of liability under the limited

warranty shall be the actual cash value of the Product at the time the Consumer returns the Product for repair, determined by the price paid by the Consumer for the Product less a reasonable amount for usage. Nokia shall not be liable for any other losses or damages. These remedies are the Consumer's exclusive remedies for breach of warranty.

- 5 Upon request from Nokia, the Consumer must prove the date of the original purchase of the Product by a dated bill of sale or dated itemized receipt.
- 6 The Consumer shall bear the cost of shipping the Product to Nokia in Melbourne, Florida. Nokia shall bear the cost of shipping the Product back to the Consumer after the completion of service under this limited warranty.
- 7 The Consumer shall have no coverage or benefits under this limited warranty if any of the following conditions are applicable:
 - a) The Product has been subjected to abnormal use, abnormal conditions, improper storage, exposure to moisture or dampness, unauthorized modifications, unauthorized connections, unauthorized repair, misuse, neglect, abuse, accident, alteration, improper installation, or other acts which are not the fault of Nokia, including damage caused by shipping.
 - b) The Product has been damaged from external causes such as collision with an object, or from fire, flooding, sand, dirt, windstorm, lightning, earthquake or damage from exposure to weather conditions, an Act of God, or battery leakage, theft, blown fuse, or improper use of any

electrical source, damage caused by computer or internet viruses, bugs, worms, Trojan Horses, cancelbots or damage caused by the connection to other products not recommended for interconnection by Nokia.

- c) Nokia was not advised in writing by the Consumer of the alleged defect or malfunction of the Product within fourteen (14) days after the expiration of the applicable limited warranty period.
 - d) The Product serial number plate or the accessory data code has been removed, defaced or altered.
 - e) The defect or damage was caused by the defective function of the cellular system or by inadequate signal reception by the external antenna, or viruses or other software problems introduced into the Product.
- 8 Nokia does not warrant uninterrupted or error-free operation of the Product. If a problem develops during the limited warranty period, the Consumer shall take the following step-by-step procedure:
- a) The Consumer shall return the Product to the place of purchase for repair or replacement processing.
 - b) If "a" is not convenient because of distance (more than 50 miles) or for other good cause, the Consumer shall ship the Product prepaid and insured to:
Nokia Inc., Attn: Repair Department
795 West Nasa Blvd.
Melbourne, FL 32901

- c) The Consumer shall include a return address, daytime phone number and/or fax number, complete description of the problem, proof of purchase and service agreement (if applicable). Expenses related to removing the Product from an installation are not covered under this limited warranty.
- d) The Consumer will be billed for any parts or labor charges not covered by this limited warranty. The Consumer will be responsible for any expenses related to reinstallation of the Product.
- e) Nokia will repair the Product under the limited warranty within 30 days after receipt of the Product. If Nokia cannot perform repairs covered under this limited warranty within 30 days, or after a reasonable number of attempts to repair the same defect, Nokia at its option, will provide a replacement Product or refund the purchase price of the Product less a reasonable amount for usage. In some states the Consumer may have the right to a loaner if the repair of the Product takes more than ten (10) days. Please contact the Customer Service Center at Nokia at the telephone number listed at the end of this warranty if you need a loaner and the repair of the Product has taken or is estimated to take more than ten (10) days.

- f) If the Product is returned during the limited warranty period, but the problem with the Product is not covered under the terms and conditions of this limited warranty, the Consumer will be notified and given an estimate of the charges the Consumer must pay to have the Product repaired, with all shipping charges billed to the Consumer. If the estimate is refused, the Product will be returned freight collect. If the Product is returned after the expiration of the limited warranty period, Nokia's normal service policies shall apply and the Consumer will be responsible for all shipping charges.
- 9 You (the Consumer) understand that the product may consist of refurbished equipment that contains used components, some of which have been reprocessed. The used components comply with Product performance and reliability specifications.
- 10 ANY IMPLIED WARRANTY OF MERCHANTABILITY, OR FITNESS FOR A PARTICULAR PURPOSE OR USE, SHALL BE LIMITED TO THE DURATION OF THE FOREGOING LIMITED WRITTEN WARRANTY. OTHERWISE, THE FOREGOING LIMITED WARRANTY IS THE CONSUMER'S SOLE AND EXCLUSIVE REMEDY AND IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED. NOKIA SHALL NOT BE LIABLE FOR SPECIAL, INCIDENTAL, PUNITIVE OR CONSEQUENTIAL DAMAGES, INCLUDING BUT NOT LIMITED TO LOSS OF ANTICIPATED BENEFITS OR PROFITS, LOSS OF SAVINGS OR REVENUE, LOSS OF DATA, PUNITIVE DAMAGES, LOSS OF USE OF THE PRODUCT OR ANY ASSOCIATED EQUIPMENT, COST OF CAPITAL, COST OF ANY SUBSTITUTE EQUIPMENT OR FACILITIES, DOWNTIME, THE CLAIMS OF ANY THIRD PARTIES, INCLUDING CUSTOMERS, AND INJURY

TO PROPERTY, RESULTING FROM THE PURCHASE OR USE OF THE PRODUCT OR ARISING FROM BREACH OF THE WARRANTY, BREACH OF CONTRACT, NEGLIGENCE, STRICT TORT, OR ANY OTHER LEGAL OR EQUITABLE THEORY, EVEN IF NOKIA KNEW OF THE LIKELIHOOD OF SUCH DAMAGES. NOKIA SHALL NOT BE LIABLE FOR DELAY IN RENDERING SERVICE UNDER THE LIMITED WARRANTY, OR LOSS OF USE DURING THE PERIOD THAT THE PRODUCT IS BEING REPAIRED.

- 11 Some states do not allow limitation of how long an implied warranty lasts, so the one year warranty limitation may not apply to you (the Consumer). Some states do not allow the exclusion or limitation of incidental and consequential damages, so certain of the above limitations or exclusions may not apply to you (the Consumer). This limited warranty gives the Consumer specific legal rights and the Consumer may also have other rights which vary from state to state.
- 12 Nokia neither assumes nor authorizes any authorized service center or any other person or entity to assume for it any other obligation or liability beyond that which is expressly provided for in this limited warranty including the provider or seller of any extended warranty or service agreement.
- 13 This is the entire warranty between Nokia and the Consumer, and supersedes all prior and contemporaneous agreements or understandings, oral or written, relating to the Product, and no representation, promise or condition not contained herein shall modify these terms.
- 14 This limited warranty allocates the risk of failure of the Product between

the Consumer and Nokia. The allocation is recognized by the Consumer and is reflected in the purchase price.

- 15 Any action or lawsuit for breach of warranty must be commenced within eighteen (18) months following purchase of the Product.
- 16 Questions concerning this limited warranty may be directed to:
Nokia Inc.
Attn: Customer Service
7725 Woodland Center Blvd., Ste. 150
Tampa, FL 33614
Telephone: 1-888-NOKIA-2U (1-888-665-4228)
Facsimile: (813) 287-6612
TTY/TDD Users Only: 1-800-24-NOKIA (1-800-246-6542)
- 17 The limited warranty period for Nokia supplied attachments and accessories is specifically defined within their own warranty cards and packaging.

Manufactured or sold under one or more of the following US Patents.
 Asterisk (*) indicates design patents pending.

5,444,816	5,699,482	5,701,392	5,754,976	4,969,192	5,291,557
5,451,954	5 400 433	5,222,189	5,357,594	5 752 225	5,394,473
5,583,962	5,274,740	5,633,981	5 297 236	4,914,701	5,235,671
5,579,430	5,227,788	5,285,498	5,481,614	5,592,584	5,781,888
5,703,999	5,299,238	5,299,239	5,299,240	5,197,087	5,490,170
5,264,846	5,268,685	5,375,189	5,581,654	5,548,574	5,717,821
4558302	4868846	4945633	4969192	5001372	5101175
5151946	5173927	5212834	5230091	5241583	5311151
5317283	5331638	5335362	5353328	5371481	5378935
5384782	5396657	5400949	5416435	5442521	5446364
5479476	5526366	5553125	5557639	5565821	5570369
5581244	5600708	5625274	5677620	5692032	5729541
5760568	5794142	5802465	5809413	5827082	5839101
5844884	5845219	5870683	5884103	5889770	5907823
5912570	5914690	5914796	5917868	5920826	5956332
5956625	5956633	5966378	5977887	5987137	5991857
6006114	6011853	6014551	6014573	6026161	6035189
6038238	6043760	6047196	6049796	6050415	6055439
6060193	6069923	6072787	6081732	6084920	6084962
6094587	6097964	6105784	6112099	6115617	6119180

6121846	6128509	6138091	6140966	6144243	6144676
6148209	6151485	6151507	6163609	6164547	6167248
6185295	6188909	6249584	6259312	6266330	6272361
6282436	6292668	6295286	6311054	6314166	6324389
6324412	6347218	6363259	6370362	6370389	6377820
6381468	6392660	6400958	6453179	6463278	6470470
6487397	6522670	6198928	4969192	5266782	5390223
5444816	5487084	5640395	5664053	5699482	5701392
5722074	5754976	5805301	5835889	5857151	5859843
5862178	5898925	5930233	5946651	5960354	5960389
5963901	6005857	6011971	6031827	6118775	6128322
6137789	6167248	6170073	6178535	6195338	6199035
6240076	6266321	6285888	6356759	6377803	6430163
6438370	6456237				

What information is needed?	Numbers	Where is the number?
My number		Wireless service provider
Voice mail number		Wireless service provider
wireless service provider's number		Wireless service provider
Provider's customer care		Wireless service provider
Model number		Label on back of phone (under battery)
Phone type	850 and 1900 GSM	Back of title page
IMEI number		Label is under the back cover, above the battery, on the right side.

Appendix A

Message from the CTIA (Cellular Telecommunications & Internet Association) to all users of mobile phones.

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Safety is the most important call you will ever make.

A Guide to Safe and Responsible Wireless Phone Use

Tens of millions of people in the U.S. today take advantage of the unique combination of convenience, safety and value delivered by the wireless telephone. Quite simply, the wireless phone gives people the powerful ability to communicate by voice--almost anywhere, anytime--with the boss, with a client, with the kids, with emergency personnel or even with the police. Each year, Americans make billions of calls from their wireless phones, and the numbers are rapidly growing.

But an important responsibility accompanies those benefits, one that every wireless phone user must uphold. When driving a car, driving is your first responsibility. A wireless phone can be an invaluable tool, but good judgment must be exercised at all times while driving a motor vehicle--whether on the phone or not.

The basic lessons are ones we all learned as teenagers. Driving requires alertness, caution and courtesy. It requires a heavy dose of basic common sense---keep your head up, keep your eyes on the road, check your mirrors frequently and watch out for other drivers. It requires obeying all traffic signs and signals and staying within the speed limit. It means using seatbelts and requiring other passengers to do the same.

But with wireless phone use, driving safely means a little more. This brochure is a call to wireless phone users everywhere to make safety their first priority when behind the wheel of a car. Wireless telecommunications is keeping us in touch, simplifying our lives, protecting us in emergencies and providing opportunities to help others in need.

When it comes to the use of wireless phones, *safety is your most important call.*

Wireless Phone "Safety Tips"

Below are safety tips to follow while driving and using a wireless phone which should be easy to remember.

- 1 Get to know your wireless phone and its features such as speed dial and redial. Carefully read your instruction manual and learn to take advantage of valuable features most phones offer, including automatic redial and memory. Also, work to

memorize the phone keypad so you can use the speed dial function without taking your attention off the road.

- 2 When available, use a hands free device. A number of hands free wireless phone accessories are readily available today. Whether you choose an installed mounted device for your wireless phone or a speaker phone accessory, take advantage of these devices if available to you.
- 3 Position your wireless phone within easy reach. Make sure you place your wireless phone within easy reach and where you can grab it without removing your eyes from the road. If you get an incoming call at an inconvenient time, if possible, let your voice mail answer it for you.
- 4 Suspend conversations during hazardous driving conditions or situations. Let the person you are speaking with know you are driving; if necessary, suspend the call in heavy traffic or hazardous weather conditions. Rain, sleet, snow and ice can be hazardous, but so is heavy traffic. As a driver, your first responsibility is to pay attention to the road.
- 5 Do not take notes or look up phone numbers while driving. If you are reading an address book or business card, or writing a "to do" list while driving a car, you are not watching where you are going. It's common sense. Don't get caught in a dangerous situation because you are reading or writing and not paying attention to the road or nearby vehicles.
- 6 Dial sensibly and assess the traffic; if possible, place calls when you are not moving or before pulling into traffic. Try to plan your calls before you begin your trip or attempt to coincide your calls with times you may be stopped at a stop sign, red light or otherwise stationary. But if you need to dial while driving, follow this simple tip--dial only a few numbers, check the road and your mirrors, then continue.
- 7 Do not engage in stressful or emotional conversations that may be distracting. Stressful or emotional conversations and driving do not mix--they are distracting and even dangerous when you are behind the wheel of a car. Make people you are talking with aware you are driving and if necessary, suspend conversations which have the potential to divert your attention from the road.
- 8 Use your wireless phone to call for help. Your wireless phone is one of the greatest tools you can own to protect yourself and your family in dangerous situations--with your phone at your side, help is only three numbers away. Dial 9-1-1 or other local

emergency number in the case of fire, traffic accident, road hazard or medical emergency. Remember, it is a free call on your wireless phone!

- 9 Use your wireless phone to help others in emergencies. Your wireless phone provides you a perfect opportunity to be a "Good Samaritan" in your community. If you see an auto accident, crime in progress or other serious emergency where lives are in danger, call 9-1-1 or other local emergency number, as you would want others to do for you.
- 10 Call roadside assistance or a special wireless non-emergency assistance number when necessary. Certain situations you encounter while driving may require attention, but are not urgent enough to merit a call for emergency services. But you still can use your wireless phone to lend a hand. If you see a broken-down vehicle posing no serious hazard, a broken traffic signal, a minor traffic accident where no one appears injured or a vehicle you know to be stolen, call roadside assistance or other special non-emergency wireless number.

Careless, distracted individuals and people driving irresponsibly represent a hazard to everyone on the road. Since 1984, the Cellular Telecommunications Industry Association and the wireless industry have conducted educational outreach to inform wireless phone users of their responsibilities as safe drivers and good citizens. As we approach a new century, more and more of us will take advantage of the benefits of wireless telephones. And, as we take to the roads, we all have a responsibility to drive safely.

The wireless industry reminds you to use your phone safely when driving.

For more information, please call 1-888-901-SAFE.

For updates: <http://www.wow-com.com/consumer/issues/driving/articles.cfm?ID=85>

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Appendix B Message from the FDA (U.S. Food and Drug Administration) to all users of mobile phones.

July 18, 2001..... For updates: <http://www.fda.gov/cdrh/phones>

Consumer Update on Wireless Phones

U.S. Food and Drug Administration

1. Do wireless phones pose a health hazard?

The available scientific evidence does not show that any health problems are associated with using wireless phones. There is no proof, however, that wireless phones are absolutely safe. Wireless phones emit low levels of radio frequency energy (RF) in the microwave range while being used. They also emit very low levels of RF when in the stand-by mode. Whereas high levels of RF can produce health effects (by heating tissue), exposure to low level RF that does not produce heating effects causes no known adverse health effects. Many studies of low level RF exposures have not found any biological effects. Some studies have suggested that some biological effects may occur, but such findings have not been confirmed by additional research. In some cases, other researchers have had difficulty in reproducing those studies, or in determining the reasons for inconsistent results.

2. What is FDA's role concerning the safety of wireless phones?

Under the law, FDA does not review the safety of radiation-emitting consumer products such as wireless phones before they can be sold, as it does with new drugs or medical devices. However, the agency has authority to take action if wireless phones are shown to emit radio frequency energy (RF) at a level that is hazardous to the user. In such a case, FDA could require the manufacturers of wireless phones to notify users of the health hazard and to repair, replace or recall the phones so that the hazard no longer exists.

Although the existing scientific data do not justify FDA regulatory actions, FDA has urged the wireless phone industry to take a number of steps, including the following:

- Support needed research into possible biological effects of RF of the type emitted by wireless phones;
- Design wireless phones in a way that minimizes any RF exposure to the user that is not necessary for device function; and
- Cooperate in providing users of wireless phones with the best possible information on possible effects of wireless phone use on human health.

FDA belongs to an interagency working group of the federal agencies that have responsibility for different aspects of RF safety to ensure coordinated efforts at the federal level. The following agencies belong to this working group:

- National Institute for Occupational Safety and Health
- Environmental Protection Agency

- Federal Communications Commission
- Occupational Safety and Health Administration
- National Telecommunications and Information Administration

The National Institutes of Health participates in some interagency working group activities, as well.

FDA shares regulatory responsibilities for wireless phones with the Federal Communications Commission (FCC). All phones that are sold in the United States must comply with FCC safety guidelines that limit RF exposure. FCC relies on FDA and other health agencies for safety questions about wireless phones. FCC also regulates the base stations that the wireless phone networks rely upon. While these base stations operate at higher power than do the wireless phones themselves, the RF exposures that people get from these base stations are typically thousands of times lower than those they can get from wireless phones. Base stations are thus not the subject of the safety questions discussed in this document.

3. What kinds of phones are the subject of this update?

The term wireless phone refers here to hand-held wireless phones with built-in antennas, often called cell mobile or PCS phones. These types of wireless phones can expose the user to measurable radio frequency energy (RF) because of the short distance between the phone and the user's head. These RF exposures are limited by Federal Communications Commission safety guidelines that were developed with the advice of FDA and other federal health and safety agencies. When the phone is located at greater distances from the user, the exposure to RF is drastically lower because a person's RF exposure decreases rapidly with increasing distance from the source. The so-called cordless phones; which have a base unit connected to the telephone wiring in a house, typically operate at far lower power levels, and thus produce RF exposures far below the FCC safety limits.

4. What are the results of the research done already?

The research done thus far has produced conflicting results, and many studies have suffered from flaws in their research methods. Animal experiments investigating the effects of radio frequency energy (RF) exposures characteristic of wireless phones have yielded conflicting results that often cannot be repeated in other laboratories. A few animal studies, however, have suggested that low levels of RF could accelerate the development of cancer in laboratory animals. However, many of the studies that showed increased tumor development used animals that had been genetically engineered or treated with cancer-causing chemicals so as to be pre-disposed to develop cancer in the absence of RF exposure. Other studies exposed the animals to RF for up to 22 hours per

day. These conditions are not similar to the conditions under which people use wireless phones, so we don't know with certainty what the results of such studies mean for human health.

Three large epidemiology studies have been published since December 2000. Between them, the studies investigated any possible association between the use of wireless phones and primary brain cancer, glioma, meningioma, or acoustic neuroma, tumors of the brain or salivary gland, leukemia, or other cancers. None of the studies demonstrated the existence of any harmful health effects from wireless phone RF exposures. However, none of the studies can answer questions about long-term exposures, since the average period of phone use in these studies was around three years.

5.What research is needed to decide whether RF exposure from wireless phones poses a health risk?

A combination of laboratory studies and epidemiological studies of people actually using wireless phones would provide some of the data that are needed. Lifetime animal exposure studies could be completed in a few years. However, very large numbers of animals would be needed to provide reliable proof of a cancer promoting effect if one exists. Epidemiological studies can provide data that is directly applicable to human populations, but 10 or more years follow-up may be needed to provide answers about some health effects, such as cancer. This is because the interval between the time of exposure to a cancer-causing agent and the time tumors develop - if they do - may be many, many years. The interpretation of epidemiological studies is hampered by difficulties in measuring actual RF exposure during day-to-day use of wireless phones. Many factors affect this measurement, such as the angle at which the phone is held, or which model of phone is used.

6.What is FDA doing to find out more about the possible health effects of wireless phone RF?

FDA is working with the U.S. National Toxicology Program and with groups of investigators around the world to ensure that high priority animal studies are conducted to address important questions about the effects of exposure to radio frequency energy (RF).

FDA has been a leading participant in the World Health Organization International Electromagnetic Fields (EMF) Project since its inception in 1996. An influential result of this work has been the development of a detailed agenda of research needs that has driven the establishment of new research programs around the world. The Project has also helped develop a series of public information documents on EMF issues.

FDA and the Cellular Telecommunications & Internet Association (CTIA) have a formal Cooperative Research and Development Agreement (CRADA) to do research on wireless phone safety. FDA provides the scientific oversight, obtaining input from experts in government, industry, and academic organizations. CTIA-funded research is conducted through contracts to independent investigators. The initial research will include both laboratory studies and studies of wireless phone users. The CRADA will also include a broad assessment of additional research needs in the context of the latest research developments around the world.

7. How can I find out how much radio frequency energy exposure I can get by using my wireless phone?

All phones sold in the United States must comply with Federal Communications Commission (FCC) guidelines that limit radio frequency energy (RF) exposures. FCC established these guidelines in consultation with FDA and the other federal health and safety agencies. The FCC limit for RF exposure from wireless telephones is set at a Specific Absorption Rate (SAR) of 1.6 watts per kilogram (1.6 W/kg). The FCC limit is consistent with the safety standards developed by the Institute of Electrical and Electronic Engineering (IEEE) and the National Council on Radiation Protection and Measurement. The exposure limit takes into consideration the body's ability to remove heat from the tissues that absorb energy from the wireless phone and is set well below levels known to have effects.

Manufacturers of wireless phones must report the RF exposure level for each model of phone to the FCC. The FCC website (<http://www.fcc.gov/oet/rfsafety>) gives directions for locating the FCC identification number on your phone so you can find your phone's RF exposure level in the online listing.

8. What has FDA done to measure the radio frequency energy coming from wireless phones?

The Institute of Electrical and Electronic Engineers (IEEE) is developing a technical standard for measuring the radio frequency energy (RF) exposure from wireless phones and other wireless handsets with the participation and leadership of FDA scientists and engineers. The standard, Recommended Practice for Determining the Spatial-Peak Specific Absorption Rate (SAR) in the Human Body Due to Wireless Communications Devices: Experimental Techniques, sets forth the first consistent test methodology for measuring the rate at which RF is deposited in the heads of wireless phone users. The test method uses a tissue-simulating model of the human head. Standardized SAR test methodology is expected to greatly improve the consistency of measurements made at different laboratories on the same phone. SAR is the measurement of the amount of

energy absorbed in tissue, either by the whole body or a small part of the body. It is measured in watts/kg (or milliwatts/g) of matter. This measurement is used to determine whether a wireless phone complies with safety guidelines.

9. What steps can I take to reduce my exposure to radio frequency energy from my wireless phone?

If there is a risk from these products--and at this point we do not know that there is--it is probably very small. But if you are concerned about avoiding even potential risks, you can take a few simple steps to minimize your exposure to radio frequency energy (RF). Since time is a key factor in how much exposure a person receives, reducing the amount of time spent using a wireless phone will reduce RF exposure.

If you must conduct extended conversations by wireless phone every day, you could place more distance between your body and the source of the RF, since the exposure level drops off dramatically with distance. For example, you could use a headset and carry the wireless phone away from your body or use a wireless phone connected to a remote antenna.

Again, the scientific data do not demonstrate that wireless phones are harmful. But if you are concerned about the RF exposure from these products, you can use measures like those described above to reduce your RF exposure from wireless phone use.

10. What about children using wireless phones?

The scientific evidence does not show a danger to users of wireless phones, including children and teenagers. If you want to take steps to lower exposure to radio frequency energy (RF), the measures described above would apply to children and teenagers using wireless phones. Reducing the time of wireless phone use and increasing the distance between the user and the RF source will reduce RF exposure. Some groups sponsored by other national governments have advised that children be discouraged from using wireless phones at all. For example, the government in the United Kingdom distributed leaflets containing such a recommendation in December 2000. They noted that no evidence exists that using a wireless phone causes brain tumors or other ill effects. Their recommendation to limit wireless phone use by children was strictly precautionary; it was not based on scientific evidence that any health hazard exists.

11. What about wireless phone interference with medical equipment?

Radio frequency energy (RF) from wireless phones can interact with some electronic devices. For this reason, FDA helped develop a detailed test method to measure electromagnetic interference (EMI) of implanted cardiac pacemakers and defibrillators from wireless telephones. This test method is now part of a standard sponsored by the

Association for the Advancement of Medical instrumentation (AAMI). The final draft, a joint effort by FDA, medical device manufacturers, and many other groups, was completed in late 2000. This standard will allow manufacturers to ensure that cardiac pacemakers and defibrillators are safe from wireless phone EMI. FDA has tested hearing aids for interference from handheld wireless phones and helped develop a voluntary standard sponsored by the Institute of Electrical and Electronic Engineers (IEEE). This standard specifies test methods and performance requirements for hearing aids and wireless phones so that no interference occurs when a person uses a compatible phone and a accompanied hearing aid at the same time. This standard was approved by the IEEE in 2000.

FDA continues to monitor the use of wireless phones for possible interactions with other medical devices. Should harmful interference be found to occur, FDA will conduct testing to assess the interference and work to resolve the problem.

12. Where can I find additional information?

For additional information, please refer to the following resources:

- FDA web page on wireless phones
<http://www.fda.gov/cdrh/phones/index.html>
- Federal Communications Commission (FCC) RF Safety Program
<http://www.fcc.gov/oet/rfsafety>
- International Commission on Non-Ionizing Radiation Protection
<http://www.icnirp.de>
- World Health Organization (WHO) International EMF Project
<http://www.who.int/emf>
- National Radiological Protection Board (UK)
<http://www.nrpb.org.uk/>

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