

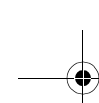
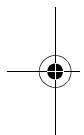


Preliminary Video player

You can view video clips that you have saved in your smartphone. The video clips can be downloaded in the smartphone from an Internet site or transferred from a PC via cable. It is also possible to send these video clips to other phones or PC's, via infrared communication, Bluetooth wireless technology and multimedia messaging.

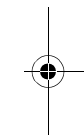
It is not necessary to download the video clips to be able to view them. You can use the streaming function and view the video clip from the Web site where it is located. The video clip is played with only a short time delay.

The video player supports the MPEG-4 file format, e.g. *name.mp4*.





List view

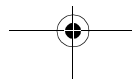
Display dump of List view
in Video player.



In the list view, you get an overview of all the MPEG-4 video clips in your smartphone. You can search for specific video clips, zoom the video clip names and sort them by name, date, size or type. At the bottom of the screen you can see how many video clips you have saved in your smartphone.

To view a video clip

1. Select  > .
2. Tap a video clip in the list.



Preliminary

Tip Use the **Find** function to locate a certain video clip, and the **Zoom** function to change the size of the screen fonts.

To sort the video clips

- Select **Edit** > choose how you want to sort the video clips in the current folder.

Preferences

When you download a video clip to your smartphone, it is saved in the download cache memory. When this memory is full you have to empty it to be able to download new video clips to your smartphone.

To clear the download cache

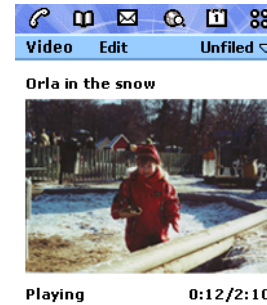
1. Select **Edit** > **Preferences**.
2. Select **Clear cache** > **Done**.

When you view a video clip from a Web site, using the streaming function, a media buffer is used to provide a steady flow of data. Increasing the size of the media buffer may improve the play-back of the video clip.

To change the media buffer size

1. Select **Edit** > **Preferences**.
2. Tap **Custom setting** > move the slider left or right.

Detail view



OBS!
New image!!





In the detail view you can send, rename, delete or categorize your video clips. Only the video clips saved in you smartphone can be handled in the detail view. To handle a video clip saved on a Sony Memory Stick, you first have to save it to your smartphone.

Icon	Function
	Stop the track that is playing.
	Play/Pause the highlighted track.
	Rewind the current track.

Video player



Preliminary

<i>Icon</i>	<i>Function</i>
	Forward the current track.
	Takes you back to the previous view.

To rename a video clip

1. Select **Video > Rename clip**.
2. Enter a video clip name > **Done**.
Two or more video clips can not have the same name.

To send a video clip

1. Select the video clip you want to send.
2. Select **Video > Send as >** choose how you want to send it.

Tip Use the **Folder** function to organize all your video clips.

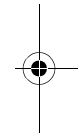
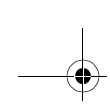
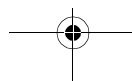
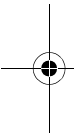
To copy the current video clip to another folder, select **Video > Copy to**, then select a folder from the list.

To view the video clip info

1. Select **Video > Clip info**.

To delete a video clip

1. Select the video clip you want to delete.
2. Select **Video > Delete clip**.

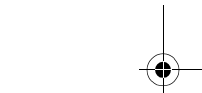
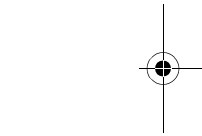


Saving video clips

When you play video clips that you have received via e-mail or multimedia messaging, or that you have downloaded to your smartphone from the Web, the viewer detail view is automatically launched. From the viewer detail view you can then save the video clip to your smartphone.

To save a video clip from another application

1. Select the video clip you want to save.
2. Select **Video > Save clip**.
3. Select what folder you want to save the video clip in > **Save**.





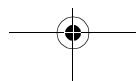
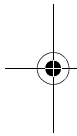
Online services

Online service is a customized service offered by a local network operator.

Online services provides a mechanism which allows applications that exist on the sim to interact and operate with the smartphone. It may provide services ranging from weather forecasts to the latest information from the stock market.

The service is dependant on a special SIM card which supports Online services.

Note *Contact your operator to find out which services are available for your account.*



Online services

Online services

Online services

Online services

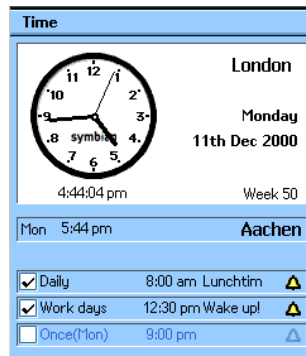


Preliminary World clock

Sources (this section will be removed)

The following documents and resources have been used when writing this chapter.

- QUARTZ DFRD Time UI Specification Rev 5 2001-03-27
- The time and date are always displayed in standby mode. You can customize the display of times and dates throughout the smartphone. You can set your current location and another location of your choice. It is also possible to set three different alarms.



Current city

Current date

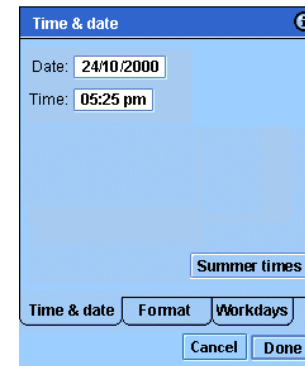
Other city

Alarm slot


Time and date

To set the current time and date

1. Select > .
2. Tap the clock to view the current time and date settings.





3. Tap the Date box, then tap the arrows to set the current year and month. Then tap the current day.
4. Tap **Daylight saving time**, then tap the checkbox next to the zone that currently has summer time > **Done**. This is only required if you are currently in a country with summer time.

5. Tap the time box, then tap the upper half of the hour or minute box to increase the number displayed, or the lower half to decrease the number.
6. Tap the **am/pm** box to switch between am and pm > . This is only possible if you use the 12-hour time format.
7. Select **Done**.

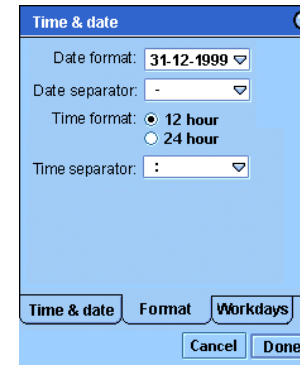
Format

You can specify how you want the time and date to be displayed on the screen, and if you want to use the 12- or 24-hour time format.

To set the time and date display format

1. Select  > .
2. Tap the clock to view the current time and date settings.

3. Select **Format**.

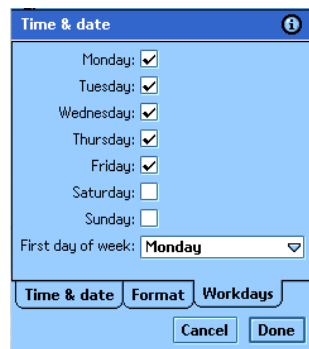


4. Tap the Date format box > choose a format.
5. Tap the Date separator box > choose a separator.
6. Select a **Time format**.
7. Tap the Time separator box > choose a separator.
8. Select **Done**.

Preliminary

Preliminary Workdays

You can specify what days you work, if, for example, you want to set an alarm that sounds only on workdays. You can also specify the first day of your week to customise the display of both Week and Month views in Calendar.



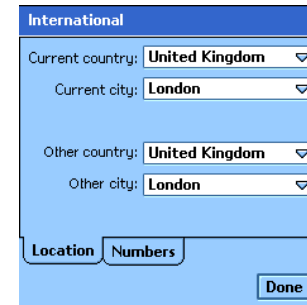
To specify your workdays

1. Select > .
2. Tap the clock > “right arrow key icon” twice.
3. Tap the checkboxes next to the days you normally work.
4. Select **First day of week** > choose a day.
5. Select **Done**.

Locations

Specify the country and city you are currently in. The city you select will be displayed next to the clock in Time.

If you are away from home, for example travelling in another country, it can be useful to know what the time is in your home country as well as the country you are in. The city you select as Other city will be displayed below the clock in Time.



To set the locations



1. Select > .
2. Select **Time** > **Set location**.
3. Tap the Current country box > the country you are in at the moment.

4. Tap the Current city box > the city you are in at the moment. If the city you are in is not listed, select the city closest to you.
5. Tap the Other country box > choose a country.
6. Tap the Other city box > choose a city.
7. Select **Done**.

Numbers

You can choose how you want the measurements and numbers in your smartphone to be displayed in all your applications. Distances can be displayed using the imperial or the metric system and different punctuation marks can be used as separators.

To set the number details

1. Select  > .
2. Select **Time > Set location**.
3. Select **Numbers**.
4. Tap the distance boxes > choose imperial or metric.
5. Choose separators and Symbol position in the same way as in 4.
6. Select **Done**.


Preliminary

Alarms



You have the possibility to set up to three different alarms in your smartphone. You can choose to activate one of the preset alarms, or set a new alarm with your own definitions.

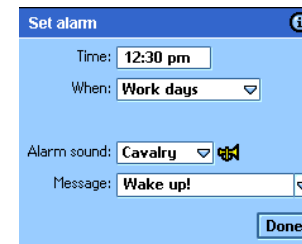
You can choose to set a silent alarm, where only a message is displayed when it goes off, or you can set a sound alert. If you are on the phone when an alarm is set to go off, the alarm will not go off until you hang up.

To activate an existing alarm

- Tap the checkbox in the alarm slot.  is displayed on the status bar on the screen.

To set a new alarm

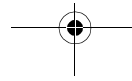
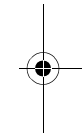
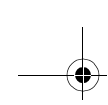
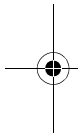
1. Select  > .
2. Tap one of the alarm slots.





Preliminary

3. Select **Time** > choose at what time you want the alarm to go off.
4. Select **When** > choose how often you want the alarm to go off:
 - **Once** The alarm will go off at a time more than 24 hours from now but within the next eight days.
 - **Next 24 hours** Within the next 24 hours.
 - **Daily** Every day at the specified time.
 - **Weekly** Every week at the specified time.
 - **Workdays** Every workday at the specified time.
5. Select **Alarm sound** > choose a sound.
6. Select **Message** > choose a preset message or write a new one.
7. Select **Done**.
8. Make sure the checkbox next to the alarm is selected.
When the alarm goes off, select **Snooze** to postpone the alarm for five minutes or **Silence** to turn off the alarm sound. To turn off the alarm completely, select **Done**.

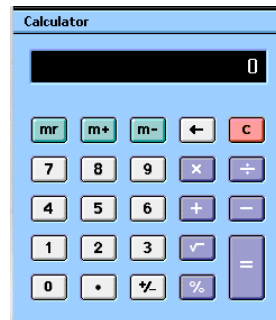


Calculator

Sources (this section will be removed)

The following documents and resources have been used when writing this chapter.

- QUARTS DFRD Calculator UI Specification Rev4 2001-03-09
- R380 user's guide



The Calculator is a standard 10-digit calculator. You can add, subtract, multiply, divide, calculate square root and percentage. It also has a memory function.

To use the calculator

1. Select > .
2. Enter the calculations by tapping the digits.

All calculations, except percentage calculations, are performed as they are entered, for example: $5+5 \times 5=50$, not 30.

Percentage calculations are performed **backwards**. To calculate, for example, 10% of 50, enter $50 \times 10\%$. The result is displayed when you tap the **%** key.

Key functions

- m+** Tap once to store an entered value in the memory. If you already have entered a value in the memory, tap once to add the value in the display to the value in the memory.
- mr** Tap once to retrieve a value from the memory and enter it into the display. Tap twice to clear the memory.
- m-** Tap once to subtract the entered value from the value in the memory. The memory is adjusted but not displayed.
- Tap once to delete the last digit you entered.
- C** Tap once to reset the display to 0.

You can copy and paste values to and from other applications by selecting **Calculator > Copy** or **Paste**.

Values stored in the memory are retained while using other programs.


Personalizing your smartphone

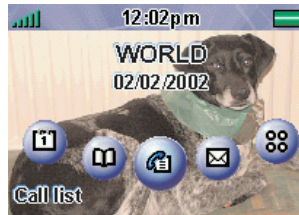
Editorial Comment: *Illustrations to be redone in greyscale and linked in by reference.*

There are a number of ways you can give your smartphone a personal touch and change its settings to suit your requirements.

Changing your Application Shortcuts

The standby screen shown when the flip is closed shows five shortcuts to applications.


From the  **Control panel** you can change them, rearrange them as you prefer, or even hide them if you wish. See “*Application shortcuts*” on page 25



Displaying the Area Code in the Standby Screen

If your network operator provides CBS (Cell Broadcast Services) with cell information you can set your smartphone to display the area code below the network name in the standby view. See “*CBS tab*” on page 129.

Setting a background picture

From the  **Control panel** you can set a background picture image for the standby screen. See “*Display*” on page 117

You can obtain suitable background picture files by downloading, beaming using  **Bluetooth** or  **Infrared** or transfer them from your PC.

Background picture images are 208 x 320 pixels and divided into two parts: the upper part, 208 x 144 pixels, carries the image seen in standby screen, the lower part can be set to a colour or design to influence the light that shines through the keys. The images can be JPEG, GIF, BMP, WBMP, MBM or PNG format.

Setting a Screen Saver

You can set a 'screen saver' image to be displayed after a period of inactivity. From the **Control panel** you can also switch this facility on and off and select the delay period before the screen saver is displayed. See “*Display*” on page 117. Key lock and device lock may be used in combination with the screen saver. When you press a button or touch the screen, you will be prompted to activate keys and/or enter the device lock code.

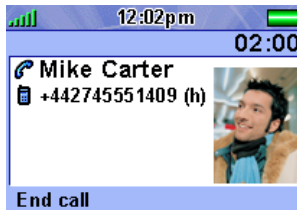
Image format is the same as for the background picture image.



Adding images to your Contacts

You can store a picture with each entry in Contacts. See “Managing contacts” on page 54.


Pictures are easily taken using the **CommuniCam** (see “CommuniCam” on page 85, though of course other images can be used.



Preliminary


If your network operator provides a CLI (Calling Line Identity) service, your smartphone can display the contact's picture together with the other information when an incoming call is received with a CLI matching that contact (not all numbers can be displayed). The contact's picture is also displayed when making a call.

To show the contact's picture when receiving an incoming call:

1. Select  **Phone > Edit > Preferences > Incoming call picture**
2. Select the **Show picture for incoming calls** check box.
3. Tap **Done**.

Ring signals

Your smartphone can play both iMelody format and polyphonic ring signals (WAV, AU, AMR, and MIDI sound file formats). You can add as many ring signals as desired, subject only to available file space.

A ring signal may be selected for an entry in  **Contacts**, so that the caller can be identified by the ring signal that is played.

You can set a voice note recording as a ring signal. See “Using voice notes as ring signals” on page 84. Choose between a recording you have made yourself, and a recording you may have downloaded, transferred from your PC, or received via e-mail, EMS or MMS.







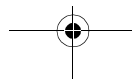
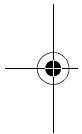
Preliminary

The recommended format for WAV files is PCM, 22,050 Hz, 8 bit, Mono, often called 'radio quality'. This format requires approximately 22 kilobytes of space for each second duration. Many PC audio applications support WAV.


Alarm tones and sound notification

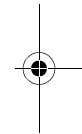
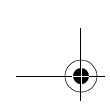
You can choose different sounds for alarms and notifications in these applications:

-  **World clock** See "Alarms" on page 8
-  **Calendar** Set a sound for reminder alerts, see "Customize the calendar" on page 78)
-  **Tasks** Set a sound for reminder alarms. See "Settings" on page 82
-  **Messages** Set a different sound for each type of message as notification of a new message:
 - SMS
 - e-mail
 - MMS
 - Notice (BIO messages)
 - Area information
 - WAP PushSee "Messaging accounts" on page 124





Master Reset

In the  **Control panel** you can reset all the settings in your smartphone to the way they were when you originally bought it. See "Master reset" on page 124 for more details.



Control panel

The Control panel is the location for all the main settings on your smartphone that are system wide and affect more than one application. This is the main place to go to initially set up your smartphone, and to change settings at any point thereafter. To access it, select  **Control Panel** in  **Applications**

To make the settings easier to find, they have been grouped into three groups shown on separate tabs: **Device**, **Connections** and **General**:

<i>Device tab</i>	<i>Connections tab</i>	<i>General tab</i>
Certificate Manager	Bluetooth	International
Display	Cable	Time & date
Flip closed shortcuts	Infrared	
Flip removed	Internet accounts	
Format disk	IP security manager	
Language	Messaging accounts	
Master reset	Secure tokens	
Storage manager	WAP accounts	
System sounds		
Text input		
User greeting		
WIM management		

To see a list of all control panel settings and the groups to which they have been assigned, tap **Control panel > Set groups**.

- To sort the list of settings by group name: at the top of the list, tap **Group**.
- To change the group to which a setting is assigned: select the name of the setting in the list.

The sections below, arranged in alphabetical order, describe the settings available for each of the default items in the **Control panel**.

Bluetooth

Bluetooth uses radio waves to enable wireless connections between your smartphone and other Bluetooth-enabled devices. This method of linking works well at a range of up to 10 metres, even if there is an obstruction between the two devices.



Preliminary

Bluetooth settings are shown on two tabs:

- Devices** A list of all the Bluetooth-enabled devices that your smartphone is paired (bonded) with.
- To change the name of a device, select the name in the list.
 - To remove a device from the list, select the name and tap **Remove**.
- Settings**
- A “friendly” device name for your smartphone
- Security-related settings:
- Its Bluetooth operation mode
 - How it should act when receiving a beamed entry.

Tip *You will probably find that the preset name of your smartphone, and of devices you pair it with, are not very meaningful or easily recognizable. It is a good idea to change these names to something more useful. The name you choose for your smartphone appears on any devices you pair it with.*

To locate other Bluetooth-enabled devices in the vicinity:

1. Tap **Add**. The **Available Bluetooth devices** dialogue opens:

- All enabled devices that are discoverable within range are shown with their name and icon. You can use **Show:** to restrict the list to one category (only PC, for example).
- Paired devices that are within range are shown with regular text.
- Non-paired devices that are within range are shown with their names in *italics*.
- Devices that are within range but unknown are shown with a preset name.

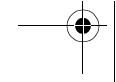
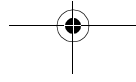
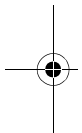
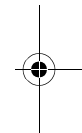
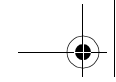
If a device you want to pair with your smartphone does not appear in the list, check that:

- It is on and within range
- Bluetooth on the device is on and discoverable.

To pair a device to your smartphone:

1. Select the device in the **Available Bluetooth devices** list
2. If the device requires a passkey you will be asked to enter it.
3. Tap **Done**

Note *The other device (a PC, for example) may require that you enter the same passkey in its own dialogue.*



Preliminary

Security

On the **Settings** tab you can set your smartphone to different operation modes:

- On** All Bluetooth functionality from your smartphone works. Your smartphone is *connectable*, paired devices can access it.
- Auto** All Bluetooth functionality from your smartphone works. Your smartphone is *not connectable*.
- Off** Bluetooth is turned off.
- Discoverable** Other Bluetooth-enabled devices can find and connect to your smartphone. To pair with another device, your smartphone must be **Discoverable**

You can also set how your smartphone should act when receiving beamed items:

- Always receive** Receives the entry automatically.
- Ask first** You will be shown a **Connection request** that you can accept or reject.
- Never receive** Rejects the item automatically.

Cable

Use **Cable** to set the cable connection mode and the connection parameters used when communicating through your smartphones cable port.

Tap **Control Panel > Connections** and select **Cable** to:

- Choose the cable connection mode: When connecting via cable the smartphone must be set in PC connect mode or Modem mode, see table below.

PC connect mode	Modem mode
• Synchronization	• Smartphone as a modem
• Installation of software	• Phone Book Manager (PC software)
• Backup and restore	

- Set the baud rate, parity, number of stop bits, character length and type of flow control required for the connection When connecting your smartphone via the desk stand to a USB port on your PC, use the following (default) settings:

Baud rate	460800
Parity	None
Stop bits	1
Character length	1
Flow control	CTS/RTS

Tip You can set the *cable connection mode* when the flip is closed by selecting  **Applications** >  **Connections** > **IconCable**.

Certificate manager

Digital certificates ensure that the web or WAP pages you visit, or any software you install, really are created by the person you expect.

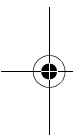


Preliminary

Certificates may be present on the pages that you view or the software that you download. Your smartphone compares these certificates with a set of certificates that is stored in **Certificate manager** to ensure the authenticity of the page or software. If the certificates do not match, your smartphone informs you, and gives you the following choices:

- Prevent the page being loaded or the software being installed
- Continue at your own risk

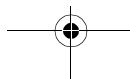
The certificates on your smartphone have been created and issued by an independent organisation to ensure their authenticity.



Security information

Security information is displayed when **Certificate manager** cannot be sure of the origin of the page or software. For example, security information will be displayed if:

- The certificate on a page has expired
 - The identity of a software manufacturer cannot be verified
- Security information is also displayed when a certificate on your smartphone has:
- Expired
 - Been revoked by the independent organisation that issued it.



Adding and removing certificates

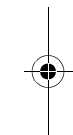
Your smartphone handles certificates automatically so, most of the time, you can browse the Internet securely without using **Certificate manager**. If you *do* need to add or remove a certificate, you will usually be informed by your network operator or system administrator. You should remove a certificate from **Certificate manager** if you are informed, or suspect, that:

- The certificate does not belong to the person who supplied it
- The certificate was issued incorrectly by the independent organisation that created it

Type of certificate

The type can be either **Certificate Authority** or **User**.

- **Certificate Authority** certificates contains server details. This type of certificate is handled by your smartphone when the server only requires server authentication. This means that your identity remains anonymous.
- **User** certificates contain your identity. This type of certificate is used when the server asks for client authentication. The client application requests you to identify yourself by choosing a user certificate.



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Display

Use the **Display** settings to control the screen and power functions of your smartphone.

Wallpaper

You can set a picture to be the background for the standby screen. (See “*Flip closed - overview*” on page 22 for details on the standby view.) Select **Browser** from the drop-down list to see image files available on your smartphone. The picture you selected last by browsing is shown as default in the list. Read more about background picture images in “*Personalizing your smartphone*” on page 110

Screen saver

You can set a screen saver image to be displayed after a period of inactivity. You can also switch this facility on and off and select a delay period of up to 15 minutes before the screen saver is displayed. Read more about screensaver images in “*Personalizing your smartphone*” on page 110

If you select the **Phone lock protected** check box the Device lock will activate when the delay runs out. Read more about locks and security in “*Phone locks*” on page 16.

Power save

You can set a power saver to switch of the screen after a period of inactivity (2, 3, 5, 7, 10, 15, or 30 minutes). When the power saver activates, the screen will be switched off.

If you set times for both screen saver and power saver the power save setting will automatically be set higher.

Light

You can set the screen light settings for car use and handheld use.

- Auto** Light switches on when you tap the screen, press a key, or receive an incoming call
- On** Light is always on
- Off** Light is always off

Lock

Tap **Lock** to activate the Screen saver immediately. If the **Phone lock protected** check box has been selected this will also activate the Device lock.

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Control panel



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Calibrate

Occasionally you may find that you tap one object (for example a button or menu option) but another is activated. Calibrating the screen ensures that the correct object is activate. To restore calibration to the factory settings, press the Jog Dial

Flip closed shortcuts

Use this dialogue to configure the application shortcuts shown in the Flip Closed **Standby** view, see “Standby view” on page 24. You can change the five shortcuts shown. If you feel that the shortcuts obscure your wallpaper you can choose to have them hidden when you don’t need them. By default these shortcut icons are displayed:

Messages Contacts Call list Calendar Applications



To change an application shortcut in the Standby view:

1. In the **Flip closed shortcuts** dialogue, select the icon you wish to change. The name of the application is shown in the **Set Application** pick list.
2. Choose the application you want to replace it with from the list.

Your choices will remain, even after power is lost. On a master reset, the default settings will be re-applied.



To hide the application shortcuts when your smartphone is inactive:

1. Clear the **Shortcuts always displayed** check box. with the caption.

Flip removed

When you use your smartphone with the hardware flip removed, you can use the keys on the virtual flip instead. Use this setting to turn it on or off (see “Virtual flip” on page 27).

Format disk

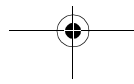
When you format a disk, you delete all the information on it, including any applications that you've installed.

Your smartphone comes with one Sony Memory Stick Duo which is displayed here. Any Sony Memory Stick Duo that you install in your smartphone is also displayed.


You can rename a disk to give it a more meaningful name.

Infrared

Use this setting to control the state of the infrared communications port of your smartphone. You can set it **On**, **Off** or **On for 10 minutes**. Read more about connecting to other devices using infrared in “Connection via infrared port” on page 127



International

Use these settings to set the locations shown in  **World Clock**, as well the units for distances, numerical separators, and how currency values should be shown. There are two tabs: **Locations** and **Numbers**

On the **Locations** tab:

- Set **Current country** and **Current city** to your current location.
- Set **Other country** and **Other city** to an alternative location (for example your home location if you are abroad).

If the city you want is not listed, select another city in the desired time zone.

On the **Numbers** tab:

- Set **Long Distance** and **Short distance** to **Imperial** or **Metric**
Long distances are those that are displayed in and are measured in miles or kilometres. Short distances are those that are measured in metres or and centimetres, or feet and inches.
- Set the decimal separator and thousands separator you desire.
- For applications that use currency values you can set a currency symbol and choose how the symbol should be placed in relation to the symbol.

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Internet accounts

You access the Internet using an Internet Service Provider (ISP), who supplies you with account details including: a username, a password, and the phone number or web site address that your smartphone automatically uses to access the Internet. You need to set up an Internet account before you can:

- Access web pages and download MMS messages
- Set up an e-mail account to send and receive e-mail messages.

Tip *A simple way of setting up an Internet account is to ask your service provider to send you a message that contains the required information to create an account automatically on your smartphone.*

There are three types of Internet account:

- Dial-up account:**  With a dial-up account, you're charged for the length of time that you're connected to the Internet.



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High-speed dial-up account:



This is a special kind of dial-up account. With a high-speed dial-up account, you're charged for the length of time you're connected but you can increase the connection speed so that information is transferred faster. Billing rates from your Internet Service Provider (ISP) may increase as you increase the connection speed.

GPRS account:



With a GPRS account, you're charged for the amount of information you view, download, or send.

The dialogue has two tabs: **Accounts** and **Other**.

Accounts tab

The Internet accounts dialogue lists all the Internet accounts that have been set up on your smartphone.

You can add a **New** account to the list and **Edit** or **Delete** an existing account

If you want to select an Internet account every time you connect to the Internet select the **Show connection** dialogue check box.

This may be useful if you use different Internet accounts for

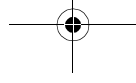
Internet and **Messages**.

Whenever you connect to the Internet, your **Preferred** account is the account that your smartphone prompts you to use.

To create a new Internet account:

1. On the **Accounts** tab, tap **New**.

2. Give the account a name. This will be the name shown in your list of accounts. (In dialogs that appear while a connection is being established the text **-GPRS** is automatically added to names of GPRS accounts).
3. Choose the **Connection type**, for the type of account that you want to create, GPRS or Dial-up.
4. Continue entering settings as required. These will differ depending on the type of account: GPRS, dial-up or high-speed dial-up:



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New **GPRS account**

For some accounts you may need to make advanced settings. Tap **Advanced** and enter settings on the tabs as described below:

GPRS Advanced settings tabs

Server **User name and password**
Normally, you do not have to enter a user name and password when you connect to a GPRS account. However, some service providers may require you to enter these details.

Address
Enter the Internet address of your GPRS account. The address is supplied by your service provider.

Log in The settings on this tab deal with IP and DNS addresses. IP and DNS addresses uniquely identify your Internet Service Provider (ISP)'s computers, which your smartphone uses to connect to the Internet. Your smartphone can normally fetch these addresses automatically from most ISPs.
If, after setting up an Internet account, you cannot connect to the Internet and you suspect these addresses are incorrect, ask your ISP for their IP and DNS addresses.

GPRS Advanced settings tabs

IP address types

There are four different types of IP addresses:

- **IPv4**: Consists of four 3-digit boxes and valid input is between 000 and 256 in each box,
- **IPv6**: Consists of eight hexadecimal boxes and valid input is between 0000 and FFFF.
- **IPv4 compatible**: Consists of six hexadecimal boxes and four 3-digit boxes. The last hexadecimal box is prefilled with 0:0:0:0. Only the four 3-digit boxes can be changed, and the valid input is between 000 and 256.
- **IPv4 mapped**: Consists of six hexadecimal boxes and four 3-digit boxes. The last hexadecimal box is prefilled with F:F:F:F. Only the four 3-digit boxes can be changed, and the valid input is between 000 and 256.

Proxy

A proxy server is a computer that stores copies of web pages so that they are retrieved faster than they would be from their original location.

To use a proxy server: specify the proxy server address and port number, which are available from your Internet Service Provider (ISP).

If you use a proxy server, you can still specify a list of web sites that are accessed from their original location. Enter the Internet address of each web site on a separate line in the list **Proxy exceptions**

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GPRS Advanced settings tabs

Other If your Internet Service Provider (ISP) supports Point to Point Protocol (PPP) extensions, you can select the **Enable PPP extensions** check box. PPP extensions allow your smartphone to provide features such as encryption, which increases the security of your Internet connection.

Your ISP may require Plain text authentication. If you select the **Plain text authentication** check box, the security of your connection will decrease during the connection process. Once you are connected, the security of your connection is restored.

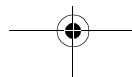
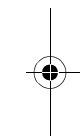
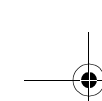
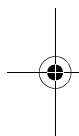
QoS Check with your mobile operator before changing any of the QoS (Quality of Service) settings. If your operator supports the use of **Header compression**, tapping **On** can speed up your connection. The settings **Delay**, **Reliability**, **Peak rate**, and **Mean Rate** are all by default set to **Subscribed**, which means that your operators default QoS (Quality of Service) values will apply.

New **dial-up or high-speed dial-up account**

Your Internet Service Provider (ISP) supplies you with your **User name**, your **Password**, and their **Phone number**, which your smartphone dials to connect to the Internet. If you have a high-speed dial-up account with your ISP you

Tip To avoid having to change the phone number when you travel abroad: enter the international dialling prefix (for example '+') and the appropriate country code for your ISP.

For some accounts you may also need to make advanced settings.



Tap **Advanced** and enter settings on the tabs as described below

Dial-up and high-speed dial-up advanced settings tabs

Log in	The settings on this tab deal with IP and DNS addresses. For an explanation of these settings, see Log in in the table <i>GPRS Advanced settings tabs</i> .
Script	As an alternative to entering your user name and password to access the Internet you may need to use a login script stored on your smartphone. Although uncommon, scripts may be required by your Internet Service Provider (ISP). Select the Use login script check box and enter the script text in the Script editor . If you select the check box Plain text authentication (required by some ISPs), the security of your connection will decrease during the connection process. Once you are connected, the security of your connection is restored. Select the checkbox Post connect terminal if: <ul style="list-style-type: none"> • The login script of the account that you are setting up requires that you input certain information or you will need to respond to prompts from the Internet account. • You are connecting to a dial-up account that uses Secure Access generated by a separate smart card or hard token.
Proxy	For an explanation of these settings, see Proxy in the table <i>GPRS Advanced settings tabs</i>
Speed	You can only increase the speed of your connection if you have a high-speed dial-up account with your Internet Service Provider (ISP).

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Dial-up and high-speed dial-up advanced settings tabs

Secure	To enable secure access for this Internet account you must link it to a vendor-associated Secure Token in this dialogue: <ol style="list-style-type: none"> 1. Select the vendor and token names of the Secure Token that you want to link to this account from the drop lists. 2. Select the Enable secure access check box. To create or delete Secure Tokens on your smartphone, tap Control panel > Connections > Secure tokens .
Other	If your Internet Service Provider (ISP) supports Point to Point Protocol (PPP) extensions, you can select the Enable PPP extensions check box. PPP extensions allow your smartphone to provide features such as encryption, which increases the security of your Internet connection. If the computer that you connect to supports call back, it can break the Internet connection after you have logged in and then call your smartphone back to re-establish the connection. Call back saves you money and increases security. To enable call back: <ol style="list-style-type: none"> 1. Select the Enable call back check box. 2. In the Call back type list, choose whether you want the ISP to call you back using the phone number stored on the provider's server (Use server number) or another phone number (Use number below).



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To Edit an Internet account:

1. On the **Accounts** tab, select the account in the list.
2. Tap **Edit**.
3. Change your settings as desired.
4. Tap **Done**.

Note *If you change the **Connection type** all account data for that account will be deleted.*

To Delete an account:

1. On the **Accounts** tab, select the account in the list.
2. Tap **Delete**.
3. Tap **Done**.

Other tab

You can use the **Dial-up timeout** and **GPRS timeout** settings to set up your smartphone to disconnect automatically from the Internet if you're not using it. The connection is broken after the period you specify has lapsed.

Preferred Mode (bearer preference)

Select **GPRS only** if you do not want to be disturbed by incoming phone calls while browsing the web. All incoming voice (and GSM data) calls are rejected.

When you have selected **GSM only** no GPRS data connection is possible.

If you select **Automatic** your smartphone will let you answer incoming GSM calls while having normal GPRS functionality. A GPRS data connection will be interrupted by a voice call.

IP security manager

The IP security manager displays stored policies and only one policy can be activated at a time.

There are two types of passwords needed:

- **IP security password:** is to be set when activating the very first policy, that is, this password is only set once, but it is possible to change it later at any time by tapping **Password** button.
- **Activation password:** is needed when a policy is activated for the first time and the supplier of the policy gives this.

Language

Use this list of all languages stored on your smartphone to change language. The highlighted entry is the language presently in use.

Tip *To conserve storage space only a limited set of languages is loaded on your smartphone at delivery. You can use the P800 Change Language utility on the PC suite for P800 CD to load and delete languages.*

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Master reset

Use **Master reset** to return your smartphone to the state it was in when originally delivered.

Warning! *All user data will be deleted and all settings will be in your smartphone to the way they were when it was originally delivered.*

If you want to keep installed applications clear the **Delete user installed applications** check box.

Messaging accounts

The  **Messages** application can handle many different types of messages, but you must first set up accounts and make settings as described below.

The Messaging accounts dialogue has four tabs, one for each type of messaging account:

Email You can have any number of e-mail accounts. To receive and send e-mail, you must first set up an Internet account (if one isn't already set up). See *"Internet accounts"* on page 123

SMS You can only have one SMS (Short Message Service) account. These settings also apply to EMS (Extended Message Service) messages.

MMS You can only have one MMS (Multimedia Messaging Service) account. To receive MMS WAP-based content you must first set up an Internet account (if one isn't already set up). See *"Internet accounts"* on page 123

CBS You can only have one CBS (Cell Broadcast Services) account. The number of Area Information channels that you can subscribe to is limited by the space on your SIM.

Tip *A simple way of setting up an e-mail or MMS account is to ask your service provider to send you a message that contains the required information to create an account automatically on your smartphone.*

Read more about the different types of messages in *"Messages"* on page 57.

Email tab

The Email tab shows a list of the e-mail accounts on your smartphone. You can add a **New** account to the list and **Edit** or **Delete** an existing account.

You can choose one of your e-mail accounts as **Preferred**. This will be the e-mail account that your smartphone uses when you use **Send as** to send an entry as e-mail directly from one of your smartphone applications

To create a new e-mail account:

1. On the Email tab, tap **New**

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2. On the **Basic** tab, enter the following settings:

Email account basic tab settings

Account name	This is the name you give to your email account.
Your name	This name appears on your outgoing e-mails.
Email address	Your Internet Service Provider (ISP) supplies you with your email address
Connection type	You probably won't need to change the connection type.
Internet account	Select one of your existing Internet accounts to access your e-mails.

3. On the **Inbox** tab, enter the following settings, as required:

Email account Inbox tab settings

User name	Your Internet Service Provider (ISP) supplies you with your user name, your password, and its incoming server address, which identifies the computer where your incoming e-mails are stored.
Incoming server address	
Password	To prevent others reading your e-mail: enter a password.

Email account Inbox tab settings

Download	If you do not have much time to download your e-mails, you can choose to receive just Just headers (the sender, subject, and date only) or set a size limit (if an email is larger than the Emails smaller than limit, only the headers are downloaded). You can download the complete email later.
Schedule	Tap Schedule to schedule an automatic download of your incoming e-mails. E-mails that are waiting in your Outbox will not be sent at the same time.

4. On the **Outbox** tab:

Email account Outbox tab settings

Outgoing server address	Your Internet Service Provider (ISP) supplies you with its Outgoing server address, which identifies the computer from which your outgoing e-mails are sent.
Use SMTP authentication	Some SMTP servers might require authentication also when sending e-mail. In that case, select the check box Use SMTP authentication and enter your User name and Password .
Use IMAP login information	If the SMTP server accepts using your IMAP login information for authentication select the check box Use IMAP login information .

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5. On the **Advanced** tab:

Email account Advanced tab settings

Secure connection	Your Internet Service Provider (ISP) will tell you whether you can use either a Secure connection or Secure password authentication .
Secure password authentication	A secure connection means that all information (including your username, password, and all messages) is encrypted to maximise security while you're connected to the Internet. In contrast, secure password authentication means that only your password is encrypted.
Outgoing mail port	You probably won't need to change the Outgoing mail port or Incoming mail port numbers.
Incoming mail port	
Use MIME encoding	MIME encoding is a standard that allows non-textual information (for example graphics) and accented characters to be sent in emails. If you should not wish to Use MIME encoding , clear the check box.

To edit an e-mail account:

1. On the **Email** tab, select the account in the list.
2. Tap **Edit**.
3. Change your settings as desired.
4. Tap **Done**.

To delete an e-mail account:

1. On the **Email** tab, select the account in the list.
2. Tap **Delete**.
3. Tap **Done**.

SMS tab

Use these settings to set up SMS and EMS messaging:

Messaging accounts SMS tab settings

Service centre address	The Service centre address is the phone number where your SMS messages are stored. It is normally imported from the SIM card but if that fails, your network operator can provide you with the service centre address.
Character Set.	Your network operator may also specify the Character Set .
Messages stored for	You can set a time limit after which SMS messages are deleted from the network by choosing a value in the Messages stored for list.

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Messaging accounts SMS tab settings

Connection type You can set the **Connection type** to one of the bearer types in the list.
If your network operator uses the GPRS network, you can choose whether to send and receive your SMS messages using this network. GPRS is generally cheaper than GSM, but in some locations GPRS may not be available. In this case, selecting GPRS preferred means that your smartphone will try to use GPRS but, if that fails, GSM will be used.

Extended messaging Clear the check box **Extended messaging** when you do not want to use EMS functions when composing your messages.

Smilies Clear the check box **Smilies** if you want to use only plain text smilies.

Tip *If you send and receive SMS messages in several countries, you can avoid having to change the service centre address when you travel abroad by entering the international dialling prefix (for example '+') and the appropriate country code for your network operator.*

You can set the **Connection type** to one of the bearer types in the list.

MMS tab

Use these settings to set up MMS messaging.:

Messaging accounts MMS tab settings

Service centre address The Service centre address is the phone number where your MMS messages are stored and it's normally imported from the SIM card but if that fails, your network operator can provide you with the service centre address.

WAP account Specify which of your configured WAP accounts you wish to use.

- WAP accounts are created in **Control panel > General (tab) > WAP Accounts**

Download method Select between Manual or Auto:

- **Manual** - only a notification will be sent to you smartphone and you can decide whether or not to download the full message.
- **Auto** - the full message is downloaded directly to your smartphone

Download size and Less than Set whether or not to have a size limit for incoming messages:

- **No restrictions** - the size of the incoming messages doesn't matter, all messages will be received.
- **Less than** - messages smaller than the limit will be received, bigger messages will be deflected.

Advanced settings

Tap **Advanced** to make settings about how your smartphone will send and receive MMS messages.

MMS Advanced settings tabs

Send The values you give these settings will be default for all MMS messages that you send. You can of course choose other values for an individual message in Messages

You can set the **Validity period** for your messages, that is, how long they should be available to the receiver.

Maximum is the default

You can give your messages a **Priority level** of **Low**, **Normal** (default) or **High**.

You can set a level of **Conformance** for the MMS messages that you send to make sure that they will be played back correctly on different products.

You can choose one of these levels:

- Standard - a warning message is displayed whenever you add non-conformant objects to an MMS. You have the option to send anyway.
- Strict - non-conformant messages or messages above 30K are not sent.
- None - non-conformant messages are sent.

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MMS Advanced settings tabs

Send (cont.) Select the check boxes to provide the function you want:
Hide number prevents the sent message from showing your number
Read report requests a read notification from receivers of your messages.
Delivery report requests a delivery notification from receivers of your messages.
Reply with history includes the original with your reply.

Receive These settings apply to MMS messages that you receive. Select the check boxes to send a notification message to the sender when a message is:

- Delivered to you: **Allow delivery notification**
- Read by you: **Allow read notification**

You can filter reception of incoming messages by message class (**Advertisements**, **Personal**, **Automatic**, **Information**) as well messages from senders listed in Contacts. Selecting a check box will filter out messages of that category.

To receive MMS messages only from senders listed in your Contacts, select all other check boxes and clear the check box for **Contacts**

CBS tab

On the CBS tab you make settings related to CBS (Cell Broadcast Services). CBS services include Area information and Cell information. The availability of Cell Broadcast Services (Cell and Area Information) is operator dependent.

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Cell information may be used to display the area code below the network name in the flip closed standby view.

Area Information is a type of text message that is sent to all subscribers in a certain network area, for example a local traffic report.

To enable Cell information:

1. Select the Cell information check box

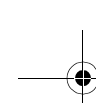
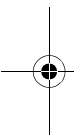
To turn Area Information on:

- Check the **Area Information** check box. Received messages will be displayed and automatically stored in the **Area Info Inbox** when dismissed.

The list shows all the channels that you have defined on your smartphone. The check box for each channel shows if it is on (checked, ready to receive messages) or off (cleared, not active):

To add a new channel:

1. Tap **New**.
2. Enter the number of the new channel in the New Channel dialogue. Channel numbers can be from 0 to 999. If there are too many channels defined **New** is disabled and you will see a message: "Maximum channels on SIM". Channel numbering is operator dependent. Please consult your network operator for information.



To turn a channel on or off:

1. Select the channel in the list and check the check box. To turn it off clear the check box.

To delete a channel:

- Tap **Delete**. Since deleting a channel cannot be undone you will be asked to confirm the delete. Deleting the channel will also delete any stored Area Information messages for that channel in your Area Info Inbox.

Alerts

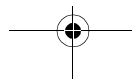
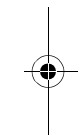
Your smartphone can notify you when a new message arrives with a different sound for each type of message that it can receive.

To set up notification, tap **Alert**.

If you check the **Display notification message** check box it will also see a notification message.

For each type of message you can either:

- Select the **Default Melody**, or
- Select **Find Melody** to open the **Select audio** dialogue, where you can browse through your folders to pick a melody from those stored on your smartphone.



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Secure tokens

Your smartphone supports secure access systems from three vendors. You manage secure access by using Secure Tokens. Read more about secure access in “*Secure Access*” on page 19.

Each token is associated with one system and with one Internet account (or none, when you use your smartphone as a Hard Token). You can configure as many tokens as needed.

The **Secure tokens** dialogue shows a list of secure access providers. Secure tokens relating to the provider's name are listed under the name in an open tree structure.

Tap **Control panel > Connections > Secure tokens** to:

- To **Edit**, **Delete**, or **Create** a new token, or
- **Generate** a password

These options are only displayed as available when a Secure token is highlighted, and greyed out when the vendors name is highlighted. The sequence of dialogues they generate will be vendor specific.

A token is associated with an Internet account through the Internet settings for the account. See “*Internet accounts*” on page 123

Many dialogue details when using secure access are vendor, system and network specific. You should contact the administrator of the network you wish to access to get the correct information.

Storage manager

This dialogue helps you do housekeeping with the storage space on your smartphone

The list shows the applications on your smartphone and the space they occupy.

Removing information from applications

To remove information from an application: tap on an application in the list. That application is displayed. Remove the old or unwanted entries or information.

Here are some house cleaning tips for different applications:

- Remove any unwanted voice notes as even short ones occupy a lot of space.
- In **Messages**, remove any old messages from your Inbox or Sent folders.
- In **Tasks**, remove all completed entries by tapping **Tasks > Delete completed** in your list of entries.
- In **Calendar**, remove all entries in a specified time period by tapping **Calendar > Remove entries** in your list of entries.
- Throughout your smartphone, use folders as you create and receive information to speed up housekeeping later.

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Removing unwanted general files

Tap **Files** to see a list of all stored general file types on your smartphone. You can remove unwanted files and launch a viewer for each file.

Uninstalling applications

If you uninstall an application you will have to reinstall the application if you want to use it later.

To uninstall an entire application, tap **Uninstall**.

Note *You cannot uninstall the applications that came with your smartphone.*

System sounds

To set the sounds given when you press a button on the keypad or tap the screen in your smartphone tap **System sounds**.

You can choose between the following sounds:

Keypad	Tone, Click or Silent
Touch screen	Click or Silent


Text input

There are several standard ways of entering text in your smartphone. See “*Entering text - Flip open*” on page 15 and “*Entering text in flip closed mode*” on page 26.



Use the settings on the **Primary**, **Alternative** and **Flip Closed** tabs to set methods for entering text in your smartphone.

Primary The method that you select here is activated automatically when you need to enter text into your smartphone.

Alternative The method that you select here is activated if you tap  at the bottom of the screen.

If you load other text input software, select it and adjust its settings here.

Time & date


Adjusting the time and date here sets these throughout your smartphone.

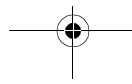
The dialogue has three tabs. You can set:

Time & date The current time and date. Here you can also switch daylight savings time on or off for your location.

Format Specify how you want the time and date to be displayed on the screen.

Workdays Specify the days in your working week

Note *These settings are also available in the  **World Clock** application.*




Preliminary


Time & date tab

To set the current date:

1. On the **Time & date** tab, tap the date. A calendar view opens. Tap the arrows to set the current year and month.
2. Tap the current date.

To set the current time:

1. On the **Time & date** tab, tap the time. Tap the upper half of the hour or minute box to increase the number displayed, or the lower half to decrease the number.
2. Tap the **am/pm** box > .
This is only possible if you use the 12-hour time format.

If the locations you have set under  **Control panel** > **International** are in a country that currently has summer time (Daylight Savings Time), you can adjust the time and date.

To switch daylight savings time on:

1. On the **Time & date** tab, tap **Daylight saving**, select the check boxes for the zones that currently have daylight savings time.
2. Tap **Done**.

Format tab

You can specify how you want the time and date to be displayed on the screen, and if you want to use the 12-hour (am/pm) or 24-hour time format.

To set the time and date display format:

1. Tap **Date format** and choose a format.
2. Tap **Date separator** > choose a separator.
3. Tap a **Time format**.
4. Tap **Time separator** choose a separator.
5. Tap **Done**.

Workdays tab

You can specify what days you work, if, for example, you want to set an alarm that sounds only on workdays. You can also specify the first day of your week to customise the display of both Week and Month views in Calendar

To specify your workdays

1. Select the check boxes next to the days you normally work.
2. Tap **First day of week** and choose a day.

User greeting

Your smartphone can show a user greeting on the standby screen when you turn it on. Use this dialogue to turn this function on or off. You can define your own user greeting text (up to 32 characters). The default is **Sony Ericsson**.

Control panel

Control panel

Control panel

Control panel



Preliminary

WAP accounts

Use these settings to set up and manage WAP accounts (sometimes called WAP profiles) on your smartphone.

WAP accounts are intended for MMS and for accessing the Internet through a WAP gateway. (Such gateways make use of proxy port 9200-9203.) All other proxy settings should be included in your Internet accounts!

For security reasons, some WAP pages and services, for example online banking, can only be accessed from a particular WAP account.

The dialogue has two tabs: **Basic** and **Preferred**.

Basic tab

The dialogue shows a list of all the WAP accounts on your smartphone. You can add a **New** account to the list and **Edit** or **Delete** an existing account.

Note *You access WAP pages through an Internet Service Provider (ISP) so, when you create a WAP account, you must choose one of your existing Internet accounts or first create a new one.*


To create a new WAP account:

1. Enter the name of the WAP account.
2. Select the Internet account you want to use.



3. If you are going to use a WAP gateway or a proxy, select the **Use proxy** check box.
 4. Enter the **IP Address** of the gateway or proxy
 5. Enter the **Port address** of the gateway or proxy.
For a WAP gateway use:
 - 9201 for a normal connection
 - 9203 for an encrypted secure connection.
- If the gateway/proxy requires **User name** and **Password**, which is very unusual, fill in the last two fields in the dialogue.

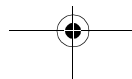
Preferred tab

Select the check box to set a preferred WAP account. It will be used when you use the **Open page** command in the  **Internet** application and when a page is opened from another smartphone application.

If you do not set a preferred WAP account, the preferred Internet account will be used when connecting to the Internet.

WIM management

WIM (WAP Identity Module) is used for performing security functions, especially to store and process information needed for user identification and authentication. It is a tamper-resistant store for private keys, certificates and other objects that may require a PIN for access or modification.



The **WIM management** dialogue consists of PIN choice list and a WIM objects list.

You can select a PIN from the PIN choice list. The WIM objects list changes content dynamically, displaying only the keys that are protected by the selected PIN and also have an associated certificate. Other keys that are protected by the selected PIN but do not have an associated certificate are not shown in the WIM object list. This is the case when WIM PIN (PIN-G) is selected.

Note *This is the PIN to access the WIM. The PIN-G applies to the whole WIM and any objects that do not have a different PIN, that is, no specific objects on the WIM are linked to PIN-G.*

You can change status of a PIN:

- **Enable PIN:** A PIN code that is enabled is requested for authorisation of an operation. To proceed with the operation you must enter the PIN code.
- **Disable PIN:** A PIN code that is disabled is not requested to authorise an operation to proceed.

To change the PIN code:

1. Select the PIN you want to change from the choice list
2. Tap **Change PIN**.

If a PIN code has been blocked, you must unblock it before it can be used again. Select the PIN and tap **Change PIN**.

Preliminary

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Control panel

Control panel

Control panel

Installing programs

Sources (this section will be removed)

The following documents and resources have been used when writing this chapter.

- Linnea prototype 6.2, SW incr. 5, PA9
- Quartz Application Installer/Remover UI Spec, 2001-03-27
- Use Case Report for 3rd Party Installation, NKX/R-01:0256, Rev A
- Linnea White Paper R1B, PA3

It is possible to install new programs, applications, in your smartphone either from the PC or directly from the smartphone. These applications can be obtained in several ways:

- from the Internet
- from a CD
- email attachment etc.

Programs can also be downloaded directly to your smartphone from other devices, the internet or via email.

There are two types of installation files for programs:

- SIS (Symbian Standard Installation)
- MIDP JAR (Mobile Information Device Profile Java Archive)

Note *SIS and JAR files are install packages containing several files.*

This chapter also applies to other types of software to install, for example, system components and add-ons.

PC Suite for P800

The PC Suite for P800 CD delivered with your smartphone contains a set of useful programs to install programs and manage your smartphone:

- **Backup and Restore** - *Make safety copies of your data.*
- **File Manager** - *Transfer files (images, documents, music etc.) between your smartphone and PC.*
- **Change Language** - *Change the system language in the smartphone.*
- **Download Station** - *Install programs in the smartphone.*
- **Smartphone Monitor** - *Monitors the connection, runs automatically.*



Sync Station - *Synchronizes data in PC and smartphone.*

- **Phone Book Manager** - *Edit SIM card from PC.*

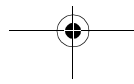
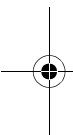
Refer to the online help for each specific program.

Installation

When inserting the CD in the PC a start menu is automatically shown. Select language and then start the PC Suite for P800 Setup. Follow the instructions in the installation wizard.

By default the PC Suite for P800 is accessed from **Start menu > Programs > Sony Ericsson > P800**

The Setup program also can be used later to add or delete components.



Preliminary

Installing programs in your smartphone

Install file security

Installation files in SIS format are typically used for installation of C++ or PersonalJava applications or other content into the smartphone's file system. The vendor who prepared the SIS file decides where in the file system the various content of the SIS file will be installed. This means that you need to decide if you trust that the SIS file does not contain harmful content. If you know for sure who produced the SIS file then you can take an install decision based on what you know about that vendor. Your smartphone supports cryptographic verification of vendor identity.

During installation the smartphone verifies a digital signature and certificate in the SIS file against a root certificate on the phone. Successful verification means that you can trust who produced the SIS file and that the content has not been modified after it was created. If the SIS file does not contain a digital signature you will be given a warning about the problem but you can still decide to proceed with installation at own risk. In general it is recommended that you install only from SIS files where the vendor identity and file integrity can be verified.





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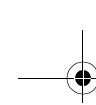
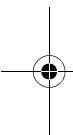
MIDP applications run in a protected environment with no access to sensitive information so no signatures are required for MIDP JAR files.

From a PC

PC Suite for P800 must be installed in your PC and the smartphone must be connected to the PC via cable, IR or Bluetooth in order to install programs from PC.

Installing programs from PC


1. Connect your smartphone to the PC via cable, infrared or Bluetooth. When connected, an icon is shown in the taskbar on the PC.
2. Start the PC software **P800 Download Station** and select application (.sis or .jar file) to install. It is also possible to double-click a file in the file manager and make the P800 Download Station start automatically.
3. Confirm to install the application in the smartphone.
4. Select target drive (phone memory or Memory Stick). Download to the smartphone begins.
5. Installation starts when download is complete.
6. Installation is complete.

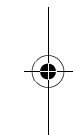


From the smartphone

Program packages can also be downloaded to your smartphone from the Internet or from Memory Stick. When downloading a file from the Internet, the installation will start automatically when the file is completely downloaded to your smartphone. The procedure below describes installation of program packages already in the smartphone but not yet installed..

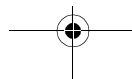
Installing programs in the smartphone

1. Tap  > **Applications** > **Install**.
2. Select software in the list.
3. Tap **Install**. If the software is certified, an information dialog is shown with the name of the software, version and supplier. Tap **Install** again.
4. Now, depending on the software, you can be prompted to replace a previous installation, select language, memory location and select other installation options.
5. Installation is complete. Tap **Done**.




Removing programs in your smartphone

It is sometimes necessary to remove installed programs and user data to free up memory.



Removing programs in the smartphone

1. Tap  > **Applications** > **Uninstall** and then select software to remove.
2. Confirm selection.
3. Tap **Done**.

Warning! *If you delete an application from your smartphone, any copy on your PC (including backups) will be deleted the next time you synchronize with your PC.*

Tip *See also **Master Reset** and **Storage Manager in Control Panel** for more options regarding removal of programs and user data.*

Preliminary

Connecting to other devices

Sources (this section will be removed)

The following documents and resources have been used when writing this chapter.

- Linnea prototype 6.2, SW incr. 5, PA9
- Linnea White Paper R1B, PA3
- Quartz Platform 6.2 UI Specification, 2001-10-01
- Use Case Report for 3rd Party Installation, NKX/R-01:0256, Rev A
- UI Func Spec, Local Communication - Cable, IrDA, 20/155 17-CRH 162 02, Rev A
- UI Func Spec, Local Communication – Bluetooth, 21/155 17-CRH 162 02, Rev A

Your smartphone can be connected to other devices with similar interfaces, such as PCs, other smartphones and PDAs.

The connection can be made via:

- Cable
- Infrared (IrDA)
- Bluetooth

Once it has been connected, you can perform various tasks, depending on what type of connection you have chosen, such as:

- Using a cordless headset (Bluetooth)
- Sending and receiving files via (Infrared , Bluetooth) – ‘beaming’
- Making Backup/Restore and Synchronisation of your data and file transfer. (Cable, Infrared and Bluetooth)
- Using the smartphone as a modem for Dial-Up Networking (Cable, Infrared and Bluetooth)

Connecting to other

Connecting to other

Connecting to other

Connecting to other

Preliminary



PC connectivity software

Your smartphone is delivered with a CD, *PC Suite for P800*. This software must be installed in the PC you want to connect to. See the chapter “*Installing programs*” on page 123 for more information. You do not need to install the *PC Suite for P800* if you only want to perform beaming with the PC or use a cordless headset.

Connection via cable

Put your smartphone in the desk stand and connect the cable to an empty USB port on the PC. When connecting via cable the smartphone must be set in PC connect mode or Modem mode, see table below. The setting is made in **Control panel > Connections > Cable**.

PC connect mode	Modem mode
<ul style="list-style-type: none">• Synchronization• Installation of software• Backup and restore	<ul style="list-style-type: none">• Smartphone as a modem• Phone Book Manager (PC software)

Serial settings

The default settings for normal use:

Baud rate:	460800
Parity:	None
Stop bits:	1
Character length:	8
Flow control:	CTSRTS

Connection via infrared port

When connecting via the infrared port, make sure that both devices are placed within one metre from each other and that the infrared ports have a free line of sight between them. The infrared port on your smartphone is located on the left hand side, next to the On/Off button.

Connecting to other

Connecting to other

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Preliminary

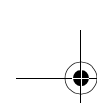
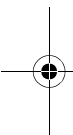
Activating the infrared port

The infrared port must be activated before communication can begin, go to **Control panel > Connections > Infrared port** and set the port state to **On** or **On for 10 minutes**. See the chapter “Control panel” on page 5 for more information on infrared settings.

Connection via Bluetooth

You can connect your smartphone to other products equipped with Bluetooth, for example PCs or other mobile phones, and exchange data. Since Bluetooth is radio-based, transmitting and receiving devices does not have to be in a free line of sight. This means that your smartphone can stay in your pocket while communicating. However, objects between transmitting and receiving units might weaken the signal.

Connection to another device be made within a range of up to 10 metres. For all tasks, except beaming, it is necessary that you first set up a permanent and trusted relationship between your smartphone and the other device. This process is called pairing (other documentation refer to it as bonding). The paired devices are remembered by your smartphone also after you have turned it off so you do not need to repeat the process for every connection with those devices. The reason for pairing is to simplify future connections and to make them secure – only paired devices can connect to your smartphone.



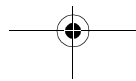
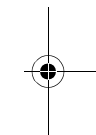
Activating Bluetooth

Activate Bluetooth on your smartphone in **Control panel > Connections > Bluetooth > Settings**. Set **Operation mode** to **Auto**, **On** or **Discoverable** and set **Receiving items** to **Ask first** or **Always receive**. See the chapter “Control panel” on page 5 for more information on Bluetooth settings.

Pairing

To let your smartphone initiate pairing with another device

1. In **Control panel > Connections > Bluetooth > Settings**, set **Operation mode** to **Discoverable**
2. In **Control panel > Connections > Bluetooth > Add**. Your smartphone searches for all devices in the vicinity and lists them.
3. Select the device you want your smartphone to pair with and, enter a passkey when asked for it. When the passkey is accepted, the pairing process is complete, refer to the section *Passkeys* below.
4. If you in the future want to allow a paired device connect to your smartphone without you explicitly approving each connection you should select **Control panel > Connections > Bluetooth > Devices**, then select a device and set the checkbox **Allow to connect without confirmation**.



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To let another device initiate pairing with your smartphone

1. In **Control panel > Connections > Bluetooth > Settings**, set Operation mode to **Discoverable**.
2. Follow the other device's manual to initiate pairing.
3. When asked for a passkey, enter the same on both devices.
4. If you in the future want to allow a paired device connect to your smartphone without you explicitly approving each connection you should select **Control panel > Connections > Bluetooth > Devices** select a device and set the checkbox **Allow to connect without confirmation**.

To remove a paired device from your smartphone

Select a device in the list and tap **Remove**.

Passkeys

Passkeys ensure that the device you pair with really is the device you think it is. A passkey is a set of numbers and/or letters (at least four characters) that you agree to exchange with the owner of the other device. Accessories like headsets often have a default passkey, usually '0000', see the specific user's guide.

Transfer items with Send As

From many applications it is possible to transfer (and receive) items like appointments, contacts and images to other users. The transfer starts by entering the **Send as** menu in the specific application.

Depending on the application and object you can choose between the following transfer methods:

- Infrared
- Bluetooth
- SMS
- MMS
- Email

Note *To be able to send or receive an item over infrared or Bluetooth, these functions must be activated. See "Activating the infrared port" on page 128 and "Activating Bluetooth" on page 146*

Connecting to other

Connecting to other

Connecting to other

Connecting to other

Synchronization

Sources (this section will be removed)

The following documents and resources have been used when writing this chapter.

- Linnea prototype 6.2, SW incr. 5, PA9
- Linnea White Paper R1B, PA3
- Users manual R380s
- UI Func Spec, Local Communication - Cable, IrDA, 20/155 17-CRH 162 02, Rev A
- UI Func Spec, Local Communication – Bluetooth, 21/155 17-CRH 162 02, Rev A
- FS Synchronisation, 35/155 17-CRH 162 02 Uen, Rev A
- UI Design Spec. Local Communication, 38/196 05-CRH 162 02 Uen, Rev A
- Quartz DFRD Connectivity Specification, rev 4.00
- Use Case Report for Synchronise Data, NKX/R-01:0200, Rev A
- Use Case Report for Backup, NKX/R-01:0278, Rev A
- Use Case Report for Restore, NKX/R-01:0279, Rev A

With PC Suite for P800 installed in your PC, your smartphone can synchronize with the following PC applications, also called Personal Information Managers (PIMs):

- Lotus® Organizer® 5 & 6
- Lotus® Notes® 4.6, 5.0
- Microsoft® Outlook® 98, 2000, 2002

Synchronization is divided into local and remote. Local synchronization is performed directly to a connected PC while remote synchronization is done over the air with a remote server in, for example, a corporate network.

Local synchronization





Local synchronization is done with either cable, infrared or Bluetooth, the functionality is the same.

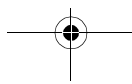
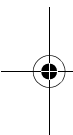
The following items can be synchronized locally:

- Email
- Contacts
- Calendar
- Tasks
- Jotter notes

Configuration of PC software

Local synchronization is initiated from the PC and all settings are made in the P800 SyncStation PC software. The easiest way is to configure the PC software to automatically make a synchronization every time your smartphone is connected. An icon, Smartphone Monitor, is shown on the PC taskbar when connected.

In the PC go to **Start menu > Programs > Sony Ericsson > P800 > SyncStation** and select the items to synchronize and select manual or automatic method. Refer the online help in P800 SyncStation PC software for more information.



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Performing a local synchronization

Making an automatic synchronization

1. Connect your smartphone via cable, infrared or Bluetooth.
2. Synchronization starts automatically.

Making a manual synchronization

1. Connect your smartphone via cable, infrared or Bluetooth.
2. In the PC, go to **Start menu > Programs > Sony Ericsson > P800 > SyncStation** and start the synchronization. Alternatively, right click on the SyncStation Monitor and select **Synchronize**.

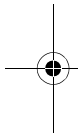




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Remote synchronization

Remote synchronization takes place over the air using the Internet and is the ideal way to keep the smartphone up to date. Using GPRS, the smartphone can be continuously connected to the remote synchronization server.




Synchronization services will be offered by mobile operators, third-party service providers and as added capability to corporate PIM applications.

The following items can be synchronized remotely:

- Email
- Contacts
- Calendar
- Tasks

Remote sync configuration

Enter  **Remote Sync** in *Applications*, tap *Edit > Settings* and fill in the following parameters:

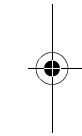
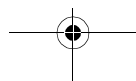
- Server address
- Username
- Password

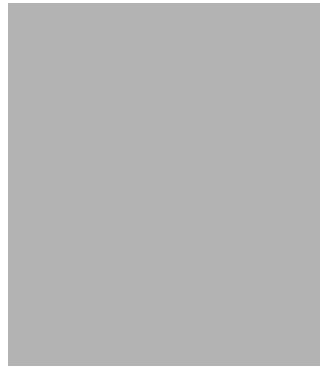
You might also need to fill in whether to use *transport login* under the Protocol tab. Contact your corporate IT help desk or your service provider for information on these parameters.

Performing a remote synchronization

Selecting items to synchronize

1. In Remote Sync, tap one item in the list you want to be synchronized.





Editorial Comment: *Picture not correct*

2. Select **Enable task** checkbox.
3. Fill in **Task name** or leave default.
4. Fill in **Server database** (Contact your corporate IT help desk or your service provider).
5. The item you selected to be synchronized is now above the divider in the list. (Disabled items are below the divider).
6. Repeat for other items.

Making a remote synchronization

1. Open **Applications > Remote Sync**, tap the **Sync** button.

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When ready, the **Task status** column show today's date for all successfully synchronized items.

Backing up data

You can use the **P800 Backup and Restore** PC software to back up the contents stored in your smartphone to your computer. Keeping backups of your smartphone's contents on your computer means that you have a separate copy of the contents of the smartphone, which can be restored into the smartphone. Backups should be done on a regular basis, a backup reminder can be set.

See the online help for **P800 Backup and Restore** for more information on how to use the program.

Preconditions

The PC Suite for P800 must be installed in the PC and the smartphone must be connected to the PC via cable.

Note *Backup and restore does not work via IR or Bluetooth*

Performing a backup

To make a backup

1. Connect your smartphone to the PC via cable.
2. In the PC, go to **Start menu > Programs > Sony Ericsson > P800 > P800 Backup and Restore**.



Preliminary

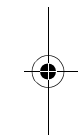
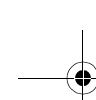
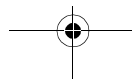
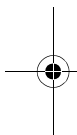
3. Select smartphone, several can be registered.
4. Start **Backup** and select media: smartphone and/or Memory Stick.
Backup begins, the progress is shown in the smartphone.
5. Follow the instructions in the smartphone.
6. Backup is complete.

Restoring data

If you have lost data or accidentally deleted information in your smartphone you can restore an earlier backup. A backup from a certain memory type (phone memory or Memory Stick) can only be restored to the same type.

To restore a backup




1. Connect your smartphone to the PC via cable.
2. Go to **Start menu > Programs > Sony Ericsson > P800 > P800 Backup and Restore** in the PC.
3. Select smartphone, several can be registered.
4. Select one of the backups in the list of previously saved backups and click **Restore**.
Restore begins, the progress is shown in the smartphone.
5. Follow the instructions in the smartphone.
6. Restore is complete.



Warning! *Everything in your smartphone will be overwritten by the chosen backup. Once you have clicked Yes to start the restore, you cannot cancel the procedure.*

Getting started with Internet and Messages

Introduction

Before you can use  **Internet** and  **Messages** to access the Internet and send or receive messages you will need to make some user-specific settings in the  Control panel.

Service provider

You will need a service provider to connect your smartphone to the network. The service provider could be:

- An internet service provider (ISP) which connects you to the internet.
- An access point provided by your network operator.
- A private service provider such as your company or your bank.

You will need to enter specific service provider details into your smartphone to set up an Internet account. It can hold the details of multiple service providers, for example, you may have separate internet and corporate accounts.

Your network operator or retailer may have pre-installed services, check with them.

Connection type

When your smartphone connects to a service provider, it will use a GSM or GPRS network provided by a network operator. Many network operators offer both GPRS and GSM services.

The connection type defines which network your account uses to connect to the Internet. GPRS Internet accounts use the GPRS network, and dial-up Internet accounts use the GSM network.

GPRS

If your network operator supports GPRS, a GPRS Internet account allows you to:

- Remain permanently connected to the Internet without being charged for connection time. With a GPRS account, you are charged for the amount of information you view, download or send when you are connected to the Internet. Check your operator for details of your subscription.
- Avoid having to reconnect to the Internet if the connection is broken.


Dial-up

For both dial-up and high-speed dial-up accounts, you are charged for the length of time you are connected. If your network operator supports them, you can increase your connection speed (at a cost) by setting up a high-speed account.

Preliminary

Automatically set up service provider and Messaging

The easiest way to set up your smartphone is automatically, through your service provider.

For  **Messages** settings your smartphone supports automatic setup of:

- e-mail accounts
- MMS (Multimedia Messaging Service) settings.

Check your service provider's web site for information or contact their support desk and ask about automatic remote configuration of ISP (Internet Service Provider) settings, e-mail and MMS settings.


If remote configuration is possible, they will send you the auto configuration messages required by SMS.

Settings valid for your network operator and one or more of these services may also be available through the phone configurator utility at www.sonyericsson.com

To check that your SMS messaging settings are correct:

1. Select  **Control panel > Connections > Messaging accounts > SMS**

Accepting new Internet or Messages settings

New configuration messages will appear in the **Auto setup** account inbox of  **Messages** (Configuration messages for e-mail accounts will, however, be found in your **SMS** inbox.)


When an auto setup message appears, select it.

A dialogue with a brief text and operator message appears on the display. You can accept the new settings or leave the message in the inbox.

If the name of the new account is the same as that of an existing account you can choose to create a new account with the same name or replace the existing account.

Warning! *Never accept remote configuration messages if you are not expecting them or are unsure where they have come from.*

Manually set up service provider


Alternatively to setting up an Internet account automatically, you can enter the settings manually from **Internet accounts** on the **Connections** tab of the  **Control panel**.

First collect all the information you will need. You can obtain this information from your ISP (Internet Service Provider), or if you are connecting to a corporate network, your IT Manager.

All settings are described in “*Internet accounts*” on page 119.

To set up a new account follow the steps under “*To create a new Internet account:*” on page 120

Manually set up Messages

Alternatively to setting up **Messages** automatically, you can enter the settings for the messaging services you want to use yourself from **Messaging accounts** on the **Connections** tab of the  **Control panel**.

First collect all the information you will need. You can obtain this information from the following sources:

- If your mobile operator offers an e-mail service you can get the necessary details from them.
- Your internet service provider.
- Your IT Manager in the case of connecting to the corporate network to access your work e-mail account.
- Your network operator in the case of SMS and CBS services.

Preliminary

The dialogue has four tabs, one for each type of messaging service:

- E-mail** The provider of your e-mail service, or for a corporate account, your IT Manager, can provide you with the necessary details.
All settings are described in “*Email tab*” on page 125.
To set up a new account follow the steps under “*To create a new e-mail account:*” on page 125.
- SMS** Short Message Service
The necessary settings are usually provided on your SIM card.
All settings are described in “*SMS tab*” on page 126.
- MMS** Multimedia Messaging Service
your MMS messaging provider will be able to provide you with the necessary information.
Before you set up MMS messaging you need to set up an Internet account in **Control panel > Internet accounts** and a WAP account in **Control panel > WAP Accounts**
All settings are described in “*MMS tab*” on page 127
- CBS** Cell Broadcast Service: Area and Cell information
Your network operator will be able to inform you if these services are available.
All settings are described in “*CBS tab*” on page 129



Preliminary

Setting up WAP accounts


A WAP account defines a service provider and gateway that should be used when making a connection to WAP services. You also need a WAP account when you use MMS (Multimedia Messaging Service).

The WAP gateway sits between your smartphone and the WAP site coding and decoding information. You can set up details of more than one gateway if necessary, for example one for your MMS messaging, one to access corporate data over WAP, and another to access your bank's WAP service.

The easiest way to set up a WAP account on your smartphone is automatically, through your service provider. Check your service provider's web site for information or contact their support desk and ask about automatic setup.

Note *You access WAP pages through an Internet Service Provider (ISP) so, when you create a WAP account, you must choose one of your existing Internet accounts or first create a new one.*

Manually set up a WAP account

Alternatively to setting up a WAP account automatically, you can enter the settings manually from **WAP Accounts** on the **Connections** tab of the  **Control panel**.



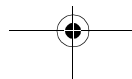
First collect all the information you will need. You can obtain this information from the WAP service provider, or if you are connecting to a corporate network, your IT Manager.

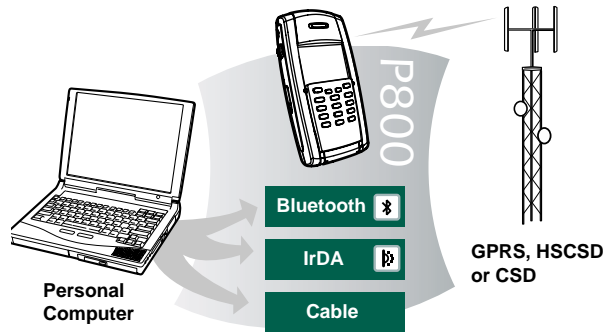
All settings are described in "*WAP accounts*" on page 133.

To set up a new account follow the steps under "*To create a new WAP account:*" on page 133

Using your smartphone as a modem

Your smartphone contains a complete GSM/GPRS modem, so you can use it to connect your PC to the internet or corporate intranet. Your smartphone appears to the laptop like a normal modem.





You link the laptop to your smartphone using Bluetooth, infrared, or cable (USB or serial). The connection over the air can be by any of the bearers that your smartphone supports:

- GPRS
- HSCSD (High-speed Circuit Switched Data)
- CSD (Circuit Switched Data).

A Windows modem driver file and a PC utility, the *Dial-Up Networking Wizard* is provided on your *PC suite for P800* CD. The wizard will help you configure DUN (Dial-Up Networking) entries on your PC for GPRS and HSCSD connections.

Preliminary

Once paired with a Bluetooth-enabled laptop, your smartphone is ready to make a connection to the Internet or corporate network. Because Bluetooth is wire-free and requires no line-of-sight alignment, you can place the laptop in a comfortable position and let your smartphone remain in your pocket, briefcase, or even be placed up to 10 metres away.

If you wish to use an infrared link the range is typically up to 1 metre. The two infrared 'eyes' must be kept in line of sight, at an angle of no more than approximately 30 degrees.

The Dial-Up Networking Wizard

The wizard simplifies creating GPRS DUN connections by setting the proper values in the PC DUN entry and linking the entry to one of the GPRS configurations in your smartphone. You can also view and modify the GPRS settings in the smartphone.

For HSCSD DUN entries, it updates the modem settings such that the specified data rate and type of bearer (ISDN / Analogue) will be used when you make a DUN connection.

You can view or change the DUN entries created with the wizard using the standard Windows DUN user interface.

The Dial-Up Networking Wizard software included in the *PC suite for P800* must be installed in your PC and your smartphone must be connected to the PC via cable, Infrared or Bluetooth.



Preliminary

You should have any information on for example phone numbers, name servers or domains that the server you wish to connect to may require available.

To set up a GPRS or HSCSD (High-speed Circuit Switched Data) connection using the Dial-Up Networking Wizard:

1. Start the **Dial-Up Networking Wizard** from the Sony Ericsson folder of the Start menu on your PC.
2. Choose Create a new dial-up connection
3. Follow the instructions in the Wizard.

To edit a previously created DUN entry:

1. Start the **Dial-Up Networking Wizard** from the Sony Ericsson folder of the Start menu on your PC.
2. Modify a dial-up connection.
3. Select the desired connection from the list.
4. Follow the instructions in the Wizard.

CSD connections

To set up a CSD (GSM Data) connection you will need to install your smartphone as a modem manually.

To set up a Dial-Up entry for CSD:

1. On the PC, open the Control Panel
2. Choose to install a new modem.



3. Choose your smartphone as the modem.
4. Select the port where the smartphone is connected.
5. Confirm the selection. A new DUN connection has been created.

Connecting

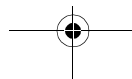
To connect using a DUN entry created by the wizard:

1. If you are connecting by cable, set your smartphone to **Modem** cable connection mode.
2. Use any conventional method to make a connection:
 - Click the Desktop shortcut created by the wizard
 - Select the entry from within the system DUN folder
 - Run an application that has built-in support for using DUN entries (for example a browser or e-mail client).

Secure Access

If you need access to a network that requires secure access (often known as “strong authentication”), for example a corporate intranet, you can set up the Internet account you use to log in to that network to use secure access and generate the required one-time password when you make the connection.

Your smartphone supports the following secure access systems:



- SecureID from RSA
- DigiPass from Vasco
- SafeWord from Security Computing

If you have a separate device or application that requires one-time passwords according to one of these systems you do not need a separate hardware token generator. Your smartphone can generate passwords that are not associated with an Internet account.

You manage secure access in your smartphone using Secure Tokens:


Each token is associated with one vendor/system and with one Internet account (or none, when you use your smartphone as a Hard Token). You can configure as many tokens as needed.

To edit, delete, create a new token, or generate a password, tap: **Control panel > Connections > Secure tokens**

Internet Account Settings

A token is associated with an Internet account through the Internet settings for the account:


To set up a Dial-up (CSD or High-speed CSD) account for Secure access:

1. Tap **Control panel > Connections > Internet Accounts**
2. Create a **New** or **Edit** an existing  Dial-up account.
3. Tap **Advanced**.

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4. On the **Secure** tab for the account select the **Enable secure access** check box.
5. Select the appropriate **Vendor** and **Token**

To set up a GPRS account for Secure access:

1. Tap **Control panel > Connections > Internet Accounts**
2. Create a **New** or **Edit** an existing  GPRS account.
3. Tap **Advanced**
4. On the **Server** tab for the account select the **User name and password required** check box.
5. Enter your **User name** if desired. If you leave it empty, you will be asked to fill it in at connection time
6. Leave the **Password** box empty.

Connecting to an Internet account

For Dial-up accounts there are two possible ways to connect to a secure access account, depending on if the login procedure uses a script and the PCT (Post Connect Terminal) or not.

To connect to a dial-up account that does not require the PCT:

1. In the Login dialogue, enter your vendor specific login information in the **PIN** box.
2. Tap **Done**, the one-time password is generated and passed to the network invisibly.



Preliminary

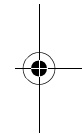
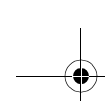
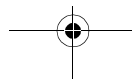
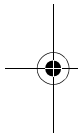
To connect to a dial-up account using the PCT:

1. In the PCT tap **Generate**.
2. In the vendor-specific **Generate Passcode** dialogue, generate the one-time password
3. Tap **Copy**.
4. Return to the PCT, tap **Paste** to enter the one-time password in the script.
5. Tap **Done**

To connect to a GPRS account:

1. In the Login dialogue, tap **Generate**.
2. Select the appropriate **Vendor** and **Token**
3. In the vendor-specific **Generate Passcode** dialogue, generate the one-time password
4. Tap **Copy**.
5. Return to the Login dialogue, enter your user name if required and tap **Paste** to enter the one-time password in the **Pin** box.
6. Tap **Done**

Tip *Many dialogue details when using secure access are vendor, system and network specific. You should contact the administrator of the network you wish to access to get the correct information.*



Trouble shooting

This chapter consists of an alphabetical selection of suggestions for solving possible problems with your smartphone.

Blocked contact card provider

The SIM card is permanently blocked after the unblocking code has been entered incorrectly ten times in a row. Contact your network operator.

Card blocked unblock?

This message appears if the PIN code has been entered incorrectly three times in a row.

To unblock the SIM card:

1. Press **YES**.
2. Enter your personal unblocking key (PUK) and press **#**.

Note Your PUK is provided by your network operator when you purchase your SIM card.

Enter new PIN appears in the display.

3. Enter your PIN code and press **#**. You can enter either your current PIN code or a new one. Repeat new PIN appears in the display.

4. Enter your PIN code again for confirmation and press **#**. If you entered both your unblocking key and PIN code correctly, the message **New PIN** appears in the display.

Alternative method for unblocking the SIM card

To unblock the SIM card, enter the following sequence:

*** 0 5 * unblock key * new PIN * new PIN #**

Display limitations

In all cases where numbers or characters exceed the available display space, truncation or dots are used to compensate for this.

Numbers are truncated at the beginning, for example **...555666777**.

Characters are truncated at the end, for example **Methusel...**

Emergency calls only

A network is within range but you are not allowed to use this network. You may, however, call the emergency number 112.



Preliminary

Fax calls

Your smartphone does not support fax transmission. Even if your operator subscription supports fax transmission, fax calls are rejected. However they can be forwarded to another number such as the office fax number, see “*Divert calls*” on page 74 for more information.

Note *Make sure potential fax callers do not try to send a fax to your smartphone as they can experience a number of retries before the fax transmission is stopped.*

Indicator light

Blinks red

This indicates that the battery is running low and soon needs recharging or replacing with a spare.

Note *With Vehicle Hands Free (VHF) equipment, make sure that the following are inserted or connected: your smartphone and its holder, the fuse in the fuse holder, and/or the external antenna.*

Does not blink

If the indicator light at the top of your smartphone does not blink and no network is displayed then there is not a network within range. See ‘No network is displayed’.



Insert card

A SIM card has not been inserted into your smartphone. See “*The SIM card*” on page 11 for instructions on inserting the SIM card.

Key symbol

The keypad is locked to prevent unintentional key action.

Press followed by to unlock the keys.

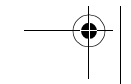
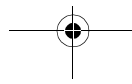
Memory/Disk full

Due to memory limitations, your smartphone has no more space available to save or store information.

Warning! *Make sure regular backups are made with Communications Suite to reduce the risk of lost or corrupted information.*

To free up memory, erase unused or old:

- Call logs.
- Contacts.
- Messages.
- Calendar To-dos or appointments.
- WAP history or bookmarks.
- Notepad notes.



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No network

This indicates that no network is within range. The reason for this is either:

1. You are in an area that is not covered by a network.
2. The received signal is too weak, possibly because you are being shielded from the signal. Move to obtain a sufficiently strong signal. Check your display Signal strength indicator.

Phone locked

Phone locked is displayed followed by the prompt **Enter lock code**.

Your smartphone is locked to prevent unauthorized use.

To unlock the smartphone:

- Enter your personal security code then press # (or **YES**).

PIN & unblocking PUK code

Contact your dealer if you have forgotten your PIN or unblocking PUK code. The only way to unlock your smartphone is by using your PIN or unblocking PUK code.

Tip Store PIN and unblocking PUK code information in a safe place. For security reasons, it may take some time to unlock the smartphone if this information is lost or misplaced.

Start problems

- Hand-held phone: Recharge or replace the battery.
- Vehicle hands free: Check that the smartphone is properly inserted into the holder and check the fuse in the fuse holder: which is connected to the battery cable.

Wrong PIN

The PIN code has been entered incorrectly. The message is followed by the prompt **Enter PIN**.

Enter the PIN code correctly and press # (or **YES**).

Note If your PIN is entered incorrectly three times in a row, the SIM card is blocked. You can unblock it by using your PUK.

Trouble shooting

Trouble shooting

Trouble shooting

Trouble shooting

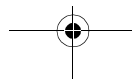
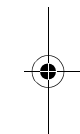
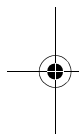


Preliminary Guidelines for safe and efficient use

Please read this information before using your mobile phone.

Recommendations

- Always treat your product with care and keep it in a clean and dust-free place.
- Do not expose your product to liquid or moisture or humidity.
- Do not expose your product to extreme high or low temperatures.
- Do not expose your product to open flames or lit tobacco products.
- Do not drop, throw or try to bend your product.
- Do not paint your product.
- Turn your product off in places where posted notices instruct you to do so and in places where mobile phones are prohibited including aircraft and hospitals.
- Do not place your product or install wireless equipment in the area above your car's air bag.
- Do not attempt to disassemble your product. Only Sony Ericsson authorised personnel should perform service.
- If your mobile phone is equipped with infrared, never direct the infrared ray at anyone's eye and make sure that it does not disturb any other infrared units.



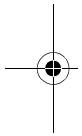


Antenna

Only use an antenna that has been specifically designed by Sony Ericsson for your mobile phone. Use of unauthorised or modified antennas could damage your mobile phone and may violate regulations, causing loss of performance and SAR levels above the recommended limits (see below).

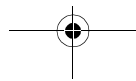
Efficient Use

Hold your mobile phone as you would any other phone. Do not cover the top of the phone when in use, as this affects call quality and may cause the phone to operate at a higher power level than needed, thus shortening talk and standby times.



Radio Frequency (RF) Exposure and SAR

Your mobile phone is a low-power radio transmitter and receiver. When it is turned on, it emits low levels of radio frequency energy (also known as radio waves or radio frequency fields).



Preliminary

Governments around the world have adopted comprehensive international safety guidelines, developed by scientific organizations, e.g. ICNIRP (International Commission on Non-Ionizing Radiation Protection) and IEEE (The Institute of Electrical and Electronics Engineers Inc.), through periodic and thorough evaluation of scientific studies. These guidelines establish permitted levels of radio wave exposure for the general population. The levels include a safety margin designed to assure the safety of all persons, regardless of age and health, and to account for any variations in measurements.

Specific Absorption Rate (SAR) is the unit of measurement for the amount of radio frequency energy absorbed by the body when using a mobile phone. The SAR value is determined at the highest certified power level in laboratory conditions, but the actual SAR level of the mobile phone while operating can be well below this value.

This is because the mobile phone is designed to use the minimum power required to reach the network. Therefore, the closer you are to a base station, the more likely it is that the actual SAR level will decrease.

Variations in SAR below the radio frequency exposure guidelines do not mean that there are variations in safety. While there may be differences in SAR levels among various mobile phones, all Sony Ericsson mobile phone models are designed to meet the relevant guidelines for radio frequency exposure.



Guidelines for safe and



Guidelines for safe and



Guidelines for safe and



Guidelines for safe and





Preliminary

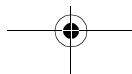
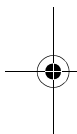
A separate leaflet with SAR information for this mobile phone model is included with the material that comes with this mobile phone. This information can also be found, together with more information on radio frequency exposure and SAR, on www.SonyEricsson.com/.

Driving

Please check if local laws/regulations restrict the use of mobile phones while driving or require drivers to use handsfree solutions. We recommend that you use only Ericsson or Sony Ericsson handsfree solutions intended for use with your product.

Always give full attention to driving and pull off the road and park before making or answering a call if driving conditions so require.

Please note that because of possible interference to electronic equipment, some vehicle manufacturers forbid the use of mobile phones in their vehicles unless a handsfree kit with an external antenna supports the installation.



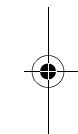
Personal Medical Devices

Mobile phones may affect the operation of cardiac pacemakers and other implanted equipment. Please avoid placing the mobile phone over the pacemaker, e.g. in your breast pocket. When using the mobile phone, place it at the ear opposite the pacemaker. If a minimum distance of 15 cm (6 inches) is kept between the mobile phone and the pacemaker, the risk of interference is limited. If you have any reason to suspect that interference is taking place, immediately turn off your mobile phone. Contact your cardiologist for more information.

For other medical devices, please consult the manufacturer of the device.

Children

DO NOT ALLOW CHILDREN TO PLAY WITH YOUR MOBILE PHONE OR ITS ACCESSORIES. THEY COULD HURT THEMSELVES OR OTHERS, OR COULD ACCIDENTALLY DAMAGE THE MOBILE PHONE OR ACCESSORY. YOUR MOBILE PHONE OR ITS ACCESSORY MAY CONTAIN SMALL PARTS THAT COULD BE DETACHED AND CREATE A CHOKING HAZARD.



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Disposing of the Product

Your mobile phone should not be placed in municipal waste. Please check local regulations for disposal of electronic products.

Power Supply

Connect the AC power adapter only to designated power sources as marked on the product. Make sure the cord is positioned so that it will not be subjected to damage or stress. To reduce risk of electric shock, unplug the unit from any power source before attempting to clean it. The AC power adapter must not be used outdoors or in damp areas. Never alter the cord or plug. If the plug will not fit into the outlet, have a proper outlet installed by a qualified electrician.

Emergency Calls

Mobile phones operate using radio signals, which cannot guarantee connection under all conditions. Therefore you should never rely solely upon any mobile phone for essential communications (e.g. medical emergencies).

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

Battery Information

We recommend that you charge the battery for 4 hours before you use your mobile phone for the first time. The battery can only be charged in temperatures between +5°C (+41°F) and +45°C (+113°F).

A new battery or one that has not been used for a long time could have reduced capacity the first few times it is used.

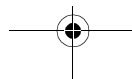
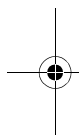
The talk and standby times depend on usage conditions and network configurations when using the mobile phone. If the mobile phone is used near a base station, less power is required and talk and standby times are prolonged.

Guidelines for safe and



Preliminary

- **Warning!** May explode if disposed of in fire.
- Use only Ericsson or Sony Ericsson branded original batteries and chargers intended for use with your mobile phone. Other chargers may not charge sufficiently or may produce excessive heat. Using other batteries and chargers could be dangerous.
- Do not expose the battery to extreme temperatures, never above +60°C (+140°F). For maximum battery capacity, use the battery in room temperature.
- Do not expose the battery to liquid.
- Do not let the metal contacts on the battery touch another metal object. This could short-circuit and damage the battery.
- Do not disassemble or modify the battery.
- Turn off your mobile phone before removing the battery.
- Use the battery for the intended purpose only.
- Keep out of children's reach.
- Do not allow the battery to be put into the mouth. Battery electrolytes may be toxic if swallowed.



Disposing of the battery

The battery should never be placed in municipal waste. Please check local regulations for disposal of batteries or call your local Sony Ericsson Customer Care Center for information.

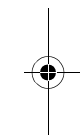
Limited warranty

Sony Ericsson Mobile Communications AB, S-221 88 Lund, Sweden, (Sony Ericsson), provides this Limited Warranty for your mobile phone and original accessory delivered with your mobile phone (hereinafter referred to as "Product").

Should your Product need warranty service, please return it to the dealer from whom it was purchased, or contact your local Sony Ericsson Customer Care Centre (national rates may apply) or visit www.SonyEricsson.com/ to get further information.

Our warranty

Subject to the conditions of this Limited Warranty, Sony Ericsson warrants this Product to be free from defects in design, material and workmanship at the time of its original purchase by a consumer, and for a subsequent period of one (1) year.



Preliminary

What we will do

If, during the warranty period, this Product fails to operate under normal use and service, due to defects in design, materials or workmanship, Sony Ericsson authorised distributors or service partners, in the country/region* where you purchased the Product, will, at their option, either repair or replace the Product in accordance with the terms and conditions stipulated herein.

Sony Ericsson and its service partners reserve the right to charge a handling fee if a returned Product is found not to be under warranty according to the conditions below.

Conditions

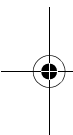
1. The warranty is valid only if the original proof of purchase issued to the original purchaser by the dealer, specifying the date of purchase and serial number**, is presented with the Product to be repaired or replaced. Sony Ericsson reserves the right to refuse warranty service if this information has been removed or changed after the original purchase of the Product from the dealer.
2. If Sony Ericsson repairs or replaces the Product, the repaired or replaced Product shall be warranted for the remaining time of the original warranty period or for ninety (90) days from the date of repair, whichever is longer. Repair or replacement may involve the use of functionally equivalent reconditioned units. Replaced parts or components will become the property of Sony Ericsson.

3. This warranty does not cover any failure of the Product due to normal wear and tear, or due to misuse, including but not limited to use in other than the normal and customary manner, in accordance with the Sony Ericsson instructions for use and maintenance of the Product. Nor does this warranty cover any failure of the Product due to accident, modification or adjustment, acts of God or damage resulting from liquid.
4. Since the cellular system on which the Product is to operate is provided by a carrier independent from Sony Ericsson, Sony Ericsson will not be responsible for the operation, availability, coverage, services or range of that system.
5. This warranty does not cover Product failures caused by installations, modifications, or repair or opening of the Product performed by a non-Sony Ericsson authorised person.
6. The warranty does not cover Product failures which have been caused by use of accessories or other peripheral devices which are not Ericsson or Sony Ericsson branded original accessories intended for use with the Product.
7. Tampering with any of the seals on the Product will void the warranty.



Preliminary

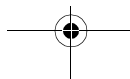
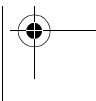
8. THERE ARE NO EXPRESS WARRANTIES, WHETHER WRITTEN OR ORAL, OTHER THAN THIS PRINTED LIMITED WARRANTY. ALL IMPLIED WARRANTIES, INCLUDING WITHOUT LIMITATION THE IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, ARE LIMITED TO THE DURATION OF THIS LIMITED WARRANTY. IN NO EVENT SHALL SONY ERICSSON OR ITS LICENSORS BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES OF ANY NATURE WHATSOEVER, INCLUDING BUT NOT LIMITED TO LOST PROFITS OR COMMERCIAL LOSS, TO THE FULL EXTENT THOSE DAMAGES CAN BE DISCLAIMED BY LAW.



Some countries/states do not allow the exclusion or limitation of incidental or consequential damages, or limitation of the duration of implied warranties, so the preceding limitations or exclusions may not apply to you.

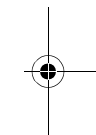
The warranty provided does not affect the consumer's statutory rights under applicable legislation in force, nor the consumer's rights against the dealer arising from their sales/ purchase contract.

* European Union (EU)



If you have purchased your Product in an EU country you can have your Product serviced, under the conditions set out above, within the warranty period in any EU country where an identical Product is sold by an authorised Sony Ericsson distributor. To find out if your Product is sold in the EU country you are in, please call the local Sony Ericsson Customer Care Centre. Please observe that certain services may not be possible elsewhere than in the country of original purchase, for example due to the fact that your Product may have an interior or exterior which is different from equivalent models sold in other EU countries. It may not be possible to repair SIM-locked Products.

** In some countries/regions additional information is requested. If so, this is clearly shown on the valid proof of purchase.

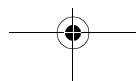
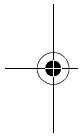




FCC Statement

Before a phone model is available for sale to the public, it must be tested and certified to the FCC that it not exceed the limit established by the government-adopted requirement for safe exposure. The tests are performed in positions and locations (i.e. at the ear and worn on the body) as required by the FCC for each model. Body worn measurements are made while the phone is in use and worn on the body with an Ericsson or Sony Ericsson branded original accessory intended for use with the phone. The design and composition of an accessory can affect the body worn SAR (Specific Absorption Rate) levels for the phone. Sony Ericsson has not measured, and make no representation about, the body worn SAR levels when the phone is used with non-Ericsson or non-Sony Ericsson branded original accessories intended for use with the phone.

This device complies with Part 15 of the FCC rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) This device must accept any interference received, including interference that may cause undesired operation.



Preliminary



Guidelines for safe and



Guidelines for safe and



Guidelines for safe and



Guidelines for safe and





Preliminary Terms and definitions

GPRS

General Packet Radio Services (GPRS) is a packet-based wireless communication service that promises data rates from 56 up to 114 Kbps and continuous connection to the Internet for mobile phone and computer users. The higher data rates will allow users to take part in video conferences and interact with multimedia Web sites and similar applications using mobile handheld devices as well as notebook computers.

HSCSD

High-Speed Circuit-Switched Data (HSCSD) is circuit-switched wireless data transmission for mobile users at data rates up to 38.4 Kbps, four times faster than the standard data rates of the Global System for Mobile (GSM) communication standard in 1999.

Bluetooth

Bluetooth is a computing and telecommunications industry specification that describes how mobile phones, computers, and personal digital assistants (PDAs) can easily interconnect with each other and with home and business phones and computers using a short-range wireless connection.

IrDA

IrDA (Infrared Data Association) is an industry-sponsored organization set up in 1993 to create international standards for the hardware and software used in infrared communication links. In this special form of radio transmission, a focused ray of light in the infrared frequency spectrum, measured in terahertz, or trillions of hertz (cycles per second), is modulated with information and sent from a transmitter to a receiver over a relatively short distance. Infrared radiation (IR) is the same technology used to control a TV set with a remote control

USB

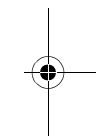
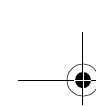
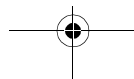
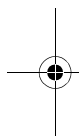
USB (Universal Serial Bus) is a plug-and-play interface between a computer and add-on devices (such as audio players, joysticks, keyboards, telephones, scanners, and printers). With USB, a new device can be added to your computer without having to add an adapter card or even having to turn the computer off.

RS232

A communication port contact/port.

SMS

Short Message Service



Preliminary

SMS (Short Message Service) is a service for sending messages of up to 160 characters (224 characters if using a 5-bit mode) to mobile phones that use Global System for Mobile (GSM) communication.

EMS

Enhanced Message Service is like SMS only it supports pictures, melodies and formatted text.

MMS

Multimedia Message Service supports photo quality pictures, videos in MPEG format and sounds in WAV or MIDI format.

WAP

(Wireless Application Protocol) is a specification for a set of communication protocols to standardize the way that wireless devices, such as cellular telephones and radio transceivers, can be used for Internet access, including e-mail, the World Wide Web, newsgroups, and Internet Relay Chat (IRC).

SyncML

SyncML is a protocol for universal synchronization of remote and local data. The protocol is sponsored by the SyncML initiative, a group supported by Lotus, IBM and others, which working to create a common protocol for synchronizing data among workstations, network application servers and mobile devices.

RSA

RSA is an Internet encryption and authentication system that uses an algorithm. The RSA algorithm is the most commonly used encryption and authentication algorithm and is included as part of the Web browsers from Microsoft and Netscape. The encryption system is owned by RSA Security. The company licenses the algorithm technologies and also sells development kits. The technologies are part of existing or proposed Web, Internet, and computing standards.

Wav

A Wave file is an audio file format, created by Microsoft, that has become a standard PC audio file format for everything from system and game sounds to CD-quality audio. A Wave file is identified by a file name extension of WAV (.wav).

CLI

A CLI is a Certified Lotus Instructor???

PIM

The SyncML specification is designed to ensure that any device can synchronize PIM data with any other device. Microsoft said SyncML support will be made available through third parties.

FC

Flip Closed

FO



Preliminary

Flip Open

MML

POP3

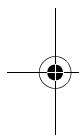
POP3 (Post Office Protocol 3) is a standard client/server protocol for receiving e-mail. The e-mail is received and held for you by your Internet server. Periodically, you (or your client e-mail receiver) check your mail-box on the server and download any mail.

IMAP4

Internet Message Access Protocol (the latest version is IMAP4) is a standard client/server protocol for accessing e-mail from your local server. The e-mail is received and held for you by your Internet server. You (or your e-mail client) can view just the heading and the sender of the letter and then decide whether to download the mail.

MPEG4

The Moving Picture Experts Group, develops standards for digital video and digital audio compression. It operates under the auspices of the International Organization for Standardization (ISO).

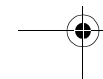
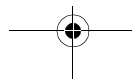
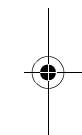
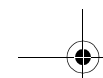


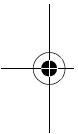
JPGis a graphic image file created by choosing from a range of compression qualities (actually, from one of a suite of compression algorithms). When you create a JPEG or convert an image from another format to a JPEG, you are asked to specify the quality of image you want. Since the highest quality results in the largest file, you can make a trade-off between image quality and file size. JPEG is an acronym for Joint Photographic Experts Group, the committee that established the baseline algorithms.

GIFThe GIF (it stands for Graphics Interchange Format) is one of the two most common file formats for graphic images on the World Wide Web. The other is the JPEG.

MP3(MPEG-1 Audio Layer-3) is a standard technology and format for compression a sound sequence into a very small file (about one-twelfth the size of the original file) while almost preserving the original level of sound quality when it is played.

MIDIMIDI (Musical Instrument Digital Interface) is a protocol designed for recording and playing back music on digital synthesizers that is supported by many makes of personal computer sound cards.





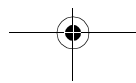
SMILSMIL (Synchronized Multimedia Integration Language), is a language that allows Web site creators to be able to easily define and synchronize multimedia elements (video, sound, still images) for Web presentation and interaction. SMIL also lets the "producer" store a media object in multiple versions, each with a different bandwidth so that a lower-bandwidth version of a Web page can be sent to users who need it.

URL(Uniform Resource Locator) is the address of a file accessible on the Internet. The type of resource depends on the Internet application protocol. Using the World Wide Web's protocol, the Hypertext Transfer Protocol (HTTP) , the resource can be an HTML page (like the one you're reading), an image file, or a Java applet. The URL contains the name of the protocol required to access the resource, a domain name that identifies a specific computer, and a hierarchical description of a file location on the computer. (e g <http://www.mhrcc.org/kingston>)

OTAOver The Air (OTA) (or Over-The-Air) is a standard for the transmission and reception of application-related information in a wireless communications system.

SIM-ATA SIM (Subscriber Identity Module) card will assist operators in providing mobile commerce applications.

GSM



Preliminary

Global System for Mobile communication) is a digital mobile telephone system. GSM uses a variation of time division multiple access (TDMA) and is the most widely used of the digital wireless telephone technologies. GSM digitizes and compresses data, then sends it down a channel with two other streams of user data, each in its own time slot. It operates at either the 900 MHz or 1800 MHz frequency band.

PTD

MeT

HTML

Hypertext Markup Language is the set of markup symbols or codes inserted in a file intended for display on a World Wide Web browser page. The markup tells the Web browser how to display a Web page's words and images for the user. Each individual markup code is referred to as a tag. Some tags come in pairs that indicate when some display effect is to begin and when it is to end.

XML

XML (Extensible Markup Language) is a flexible way to create common information formats and share both the format and the data on the World Wide Web, intranets, and elsewhere. For example, computer makers might agree on a standard or common way to describe the information about a computer product (processor speed, memory size, and so forth) and then describe the product information format with XML.





Preliminary

XHTML

XHTML (Extensible Hypertext Markup Language) is "a reformulation of HTML 4.0 as an application of the Extensible Markup Language (XML)." For readers unacquainted with either term, HTML is the set of codes (that's the "markup language") that a writer puts into a document to make it displayable on the World Wide Web.

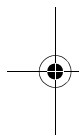
WTLS

Wireless Transport Layer Security (WTLS) is the security level for Wireless Application Protocol (WAP) applications. WTLS was developed to address the problematic issues surrounding mobile network devices - such as limited processing power and memory capacity, and low bandwidth - and to provide adequate authentication, data integrity, and privacy protection mechanisms.

WIM

SWIM

PIN) A PIN is a personal identification number. PINs are commonly assigned to bank customers for use with automatic cash dispensers. They are also used, sometimes with a security token, for individual access to computer networks or other secure systems.



SIThe International System of Units (abbreviated "SI" from the French version of the name) is a scientific method of expressing the magnitudes or quantities of seven important natural phenomena. This system was formerly called the meter-kilogram-second (MKS) system.

SL

OTA

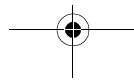
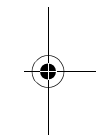
Over The Air (OTA) (or Over-The-Air) is a standard for the transmission and reception of application-related information in a wireless communications system.

BMP

Bitmap. A graphic picture where the are of the picture is divided in a number of pixels. Each pixel represent a color.

PIM

CSD

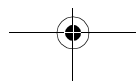
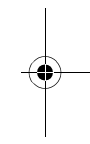
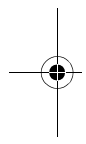


Preliminary

Terms and definitions Terms and definitions Terms and definitions Terms and definitions



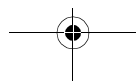
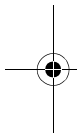
Preliminary





Quick guide for common tasks

[A table with simplified descriptions of the most common actions]



Quick guide for common
Quick guide for common
Quick guide for common
Quick guide for common



Technical Specifications

General

Product name	P800 Standard version, latin character set) / P802 (Chinese version)
Size	117 x 59 x 27 mm
Weight	158 grams with battery and flip 148 grams with battery, flip removed.
System and power class	E-GSM 900 Class 4 GSM 1800 Class 1 GSM 1900 Class 1
Antenna	Built in
Speech Coding	HR, FR, EFR supported where available, for high speech quality.
SIM Card	Small plug-in card, 3V or 5V type
Operating System	Symbian OS v7.0 Based on the 'UIQ' design.
Processor	ARM 9
User storage	For settings, user data (e.g. images, contacts, messages) and third party applications: P800: 12Mbyte P802: 9Mbyte (dictionary not activated)

Battery Life

Standard battery	Talk Time: up to 13 hours Standby time: up to 400 hours
------------------	---

GPRS Maximum Data Rates (kbps)

		CS-1	CS-2	CS-3	CS-4
		9.05kbps	13.4kbps	15.6kbps	21.4kbps
4	Rx	36.2	53.6	62.4	85.6
	+				
1	Tx	9.05	13.4	15.6	21.4

Speed achieved depends on the Coding Scheme supported by the GSM Network.

Preliminary

HSCSD Maximum Data Rates (kbps)

		9.6 kbps per timeslot	14.4kbps per timeslot
2 +	Rx	19.2	28.8
1	Tx	9.6	14.4

Screen

Display type	TFT
Display size	Flip closed: 208 x 144 pixels, 40 x 28 mm Flip open: 208 x 320 pixels, 40 x 61 mm
Pixel size	0.192 mm
Colour resolution	12-bit (4096 colours)
Screen surface	Touch-sensitive, anti-reflective
Illumination	Front-light

Keypad

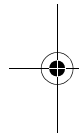
- 16 hard plastic keys on hinged/removable flip
- Jog Dial, 4-way (up, down, towards, away) + select.
- Browser button to switch to integrated browser
- CommuniCam button - switches to camera viewfinder and acts as shutter.
- On-Off button



Preliminary

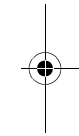
Input

	P800 (Standard version)	P802 (Chinese version)
Flip Closed	Numeric keypad on flip Latin characters on number keys	Numeric keypad on flip Stroke Pinyin Bopomofo
Flip Open	Touch-screen Natural character recognition On-screen virtual keyboard	Touch-screen Chinese character recognition English character recognition Numeric character recognition Stroke Pinyin Bopomofo



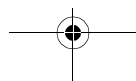
MMI Languages

	P800 (Standard version)	P802 (Chinese version)
Languages loaded; unwanted languages are deleted upon initialisation to free user storage space.	Danish (DA), Dutch (NL), English UK, English US, Finnish (FI), French (FR), German (DE), Greek (EL), Italian (IT), Latin American English (R1), Norwegian (NO), Portuguese (PT), Spanish (ES), Swedish (SV), Turkish (TR)	Chinese (Simplified, ZS) Chinese (Traditional, ZT) Chinese (Hong Kong, ZH) English UK



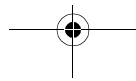
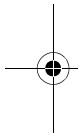
Third Party Application Support

SDKs	C++ PersonalJava™ J2ME CLDC 1.0/MIDP
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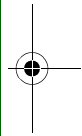
Load formats	C++ or Java™ applications in Symbian SIS format.MIDP installation (JAR/ JAD) from Browser or connected PC
Security	Support for signed applications



Preliminary



Technical Specifications

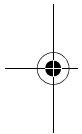




Preliminary

Telephony

Handsfree options:	Built-in Office Speakerphone Portable Handsfree Bluetooth Headset (optional accessory) Stereo Headset (optional accessory)
Picture Phone Book	Picture of contact displayed when making outgoing call Picture of caller displayed when incoming call CLI matches entry in Contacts.
Personal ringtones	Sound clips as personal ringtones.
Voice control	Voice Dialling Voice Answering Magic Word activation Up to 100 voice commands.
Other features:	Support for calling cards Access most applications whilst on a phone call Flight mode, enabling P800 to be used as a PDA in locations where radio transmitters must be switched off. GSM and Bluetooth are switched off when in flight mode.
SIM-AT	SIM Application Toolkit according to GSM 11.14
USSD	Incoming and outgoing

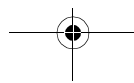
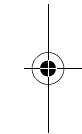


Personal Organiser

Applications	Contacts (Address Book) Calendar (Diary) Tasks ('To-Do' list) Jotter (Text and 'ink' notes) Voice Memo (Dictaphone) World Clock Calculator (P802 only) English-Chinese-English Dictionary (P802 only) Lunar Calendar
--------------	--

Integrated CommuniCam

Image Size	640 x 480 pixels (VGA) 320 x 240 pixels (QVGA) 160 x 120 pixels (QQVGA)
Colour depth	24 bit (16.78 million colours)
Storage format	JPEG/JFIF, 3 quality (compression) levels, user-selectable.
Other features	Delay timer Brightness and Contrast settings White Balance (4 pre-set values plus automatic) Flicker-free setting (for fluorescent lighting) Backlight mode (when there is light behind the subject) CommuniCam button switches to viewfinder and acts as the shutter.



Preliminary

Image Viewer

Formats JPEG, BMP, GIF, MBM, PNG, WBMP
Sharing via IR, Bluetooth, MMS, E-Mail, PC file transfer

Image Editor

Usage The Image Editor is available when composing MMS messages.
Functions Crop, Rotate, Rescale
Electronic ink (draw on picture) Colour, pen size, eraser function

Video Player

File Format .MP4 (MPEG4)
Streaming transport RTSP according to 3GPP
Video coding MPEG-4 Simple Visual Profile Level 0H263 Profile 0 Level 10H263 Profile 3 Level 10
Audio coding AMR; AAC

Audio Player

File Format .MP3, WAV, AU, G-MIDI and AMR

Messaging: SMS

Classes 0, 1 and 2
Bearer GSM and GPRS
Broadcast Basic & Extended channel
Concatenated up to 255 messages

Messaging: EMS

Standards compliance 3GPP 23.040 Version 4
Supported objects Sounds, Melodies, Pictures, Animations
Image editor User may create and edit icons (16x16 and 32x32 pixels)

Messaging: MMS

Image formats GIF, JPG, BMP, WBMP, PNG
Audio format AMR, WAV, iMelody
Presentation SMIL
Conformance 3GPP 23.140 V5.0
Nokia/Ericsson 'MMS Conformance Document V2.0.0'



Preliminary

Messaging: E-Mail

Incoming mail server support	POP3, IMAP4
Outgoing mail server support	SMTP
Content coding	MIME compliant
Attachment Viewers	VCard, vCal, Document viewers as below
Other features	Automatic download of messages over GPRS 'always on' connection

Document Viewers

On-board	Microsoft® Word Microsoft® Excel Microsoft® Powerpoint® Adobe® Acrobat® (PDF)
Supplied on CD-ROM	Over 20 further formats

Integrated browser technical data

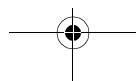
Markup Languages	HTML 3.2 (excluding features not relevant to a small screen device)WML 1.2.1WBXMLxHTML BasicxHTML Mobile ProfilecHTML
WAP version	2.0
Scripting	Compiled WML scripts
Style sheets	WCSS



Images	WBMP, GIF (including animated), JPEG
Bearer	GPRS, HSCSD, CSD
Security	WTLS Class 1, 2, 3 TLS/SSL
Certificates	Pre-install & downloadWTLS, X509
WIM	WIM interface including SIM-WIM (SWIM)
Bookmark	import/exportIrDA, Bluetooth, SMS, MMS, E-Mail
Bookmarks	Yes, number only limited by available user storage
Home Page	Yes
Cache	15 - 120kbyte user-configurable; 30kbyte default.
Clear cache function	Yes
Hyperlinks	<u>Underlined</u> in text Image according to Style Sheet.
WAP Accounts (WAP Profiles)	Yes. Integrated with bookmarks. Quantity only limited by available user storage.
OTA Support	Ericsson/Nokia OTAWAP Forum Provisioning

M-Services

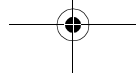
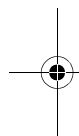
Compliant with M-Services specification, Phase 1



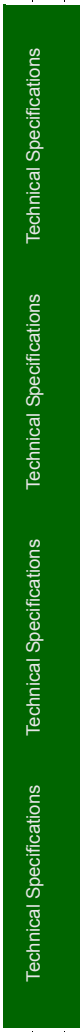


MeT

Compliant with MeT specification, version 1.0



Preliminary

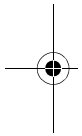




Preliminary

User Customisation

Wallpaper FC only	JPEG, GIF, BMP, WBMP 208 x 320 pixels wallpaper image size. 208 x 144 pixels visible area with flip closed.
Screen saver	FC and FOJPEG, GIF, BMP, WBMP Animated GIF supported; note that animation uses more power. 208 x 320 pixels FO image size 208 x 144 pixels visible area with flip closed (same image as FO)
Ring tones Alarm tones	iMelody WAV, AU, AMR. Recommended format for WAV files is PCM, 22,050Hz, 8 bit, Mono, often called 'radio quality'
Application selection	Application available via FC on-screen icons. Applications available from Application Picker in FO mode.

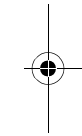
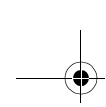


Coverage area

Up to 10 metres (33 feet)

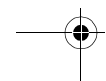
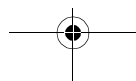
Bluetooth functions

Generic Access Profile
Serial Port Profile
Generic Object Exchange Profile
Dialup Networking Profile
Object Push Profile
Headset Profile



Bluetooth Wireless Technology

Bluetooth compatibility statement	This product is manufactured to comply with the Bluetooth spec. 1.1.
-----------------------------------	--



Preliminary

Infrared Transceiver

Data transmission rate Max speed between phone and IrDA device (e.g. PC, another phone) SIR: up to 115,200 bps

Remote Synchronisation

Data Contacts
 Calendar
 Tasks
Bearer HTTP
Protocol SyncML

Local Synchronisation

Data Contacts
 Calendar
 Tasks
 Jotter text notes
 E-Mail
Bearer Bluetooth
 IrDA
 USB
Protocol SyncML
PC Applications supported Lotus Organizer 5 & 6
 Lotus Notes 4.6 & 5.0
 Microsoft® Outlook® 98, 2000,
 2002

PC Connectivity Solutions

- Drag-and-drop file transfer between the P800 and the PC. ^ (e.g. Word documents, JPEG images)
- Backup and Restore of user data and settings
- Load new application
- Change MMI Language
- Use P800 as wireless modem. Security

Data protection SIM PIN (at power on) Device Lock (at power on and/or activated by screensaver)
Browser TLS, SSL, WTLS, Certificate handling
Third party applications Support for signed applications
Intranet Access SecureID® from RSA Security SafeWord from Secure Computing DigiPass from Vasco

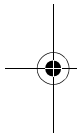
Technical Specifications



Preliminary

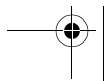
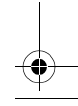
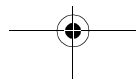
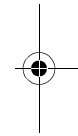
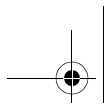
Remote Configuration

Ericsson/Nokia OTA Settings specification	WAP Account (Account name and WAP Gateway information)
	ISP Settings (Bearer information, username, password)
	Bookmark (name and URL)
	SyncML settings
	MMS Settings
WAP Forum specifications	WAP Account
	ISP Settings
	Bookmarks
Smart Messaging Specification	ISP Settings
	E-Mail account

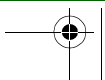
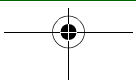
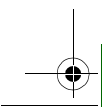
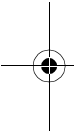
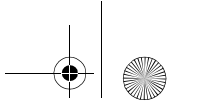
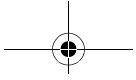
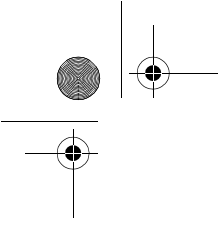


Location Based Services

Mobile-assisted E-OTD positioning according to FCC E-911 Phase 2



Preliminary





Demo Application

The Demo application shows a slide show of some functions of the smartphone:

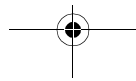
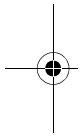
- How to send and receive messages
- How to find a contact and make a call
- How to take a picture and send it
- How to personalize the phone and handle short-cuts

To start the Demo

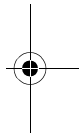
1. Select the Applications icon 
2. Select the demo icon 
3. The demo is started

To stop the Demo

1. Any input will stop the demo. The demo is also stopped at:
 - An incoming call
 - An incoming SMS/EMS/MMS message



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Demo Application
Demo Application
Demo Application
Demo Application



Document Viewer

Document viewer is an application used to view various types of documents:

- Word processing documents
- Spreadsheets
- Drawings
- PDF documents
- Presentations
- Archives

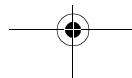
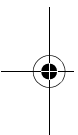
Document viewer has two views in open mode:

List view An alphabetical list of files, for selecting a file to view.

File view The contents of a file, for viewing and manipulating the file.

Except from the list view, a document can also be opened from another application, e.g. by selecting a appended document in an e-mail.

The functions available differ depending on the document type. General functions are similar between the document types and are therefore described separately.



General functions

In all views there is a menu bar from where you can access some of the functions. This section describes the functions that are common for all document types.



Document Viewer

Document Viewer

Document Viewer

Document Viewer



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List view

Menus	Option	Description
Viewer	Find file	Search files with a name containing a specific text.
Edit	Sort by name	Sort the file list by name.
	Sort by size	Sort the file list by file size.
	Zoom	Set zoom level, small, medium or large.
Folders	All	Show all files in the list.
	Unfiled	Show the files that is not in a folder.
	Edit folders	Categorize your files in folders (for example business or personal).

Detail view

Menus	Option	Description
Document	Rename	Rename the document.
	Send as	Send a document as e-mail, MMS, IR or Bluetooth.
	Save (if opened from another application)	Save the document in the smartphone.
	Delete	Delete the active document.
	Properties	Show information on the active document.

Menus	Option	Description
Edit	Copy to (if opened from the Document viewer only)	Copy the document to another location, for example memory stick in the smartphone.
	Zoom in	Increase the view of the file.
	Zoom out	Decrease the view of the file.
	Restore	Restore to the original size.
Folders	Unfiled	Show the contacts that is not in a folder.
	Edit folders	Categorize your documents in folders (for example business, personal etc.).



To open a document from an e-mail

1. Select the document link.
2. The document viewer is started, showing the file view of the document.

To save the document in the smartphone

1. Select **Document > Save** from the menu.
2. Select where to save the document and select **Save**.

To open a document from the list view

1. Select the Application launcher icon .
2. Select the Document viewer icon .
3. If required, change folder.

Document Viewer



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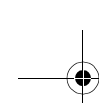
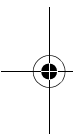
4. Scroll to the desired file and select the file name.
The document is shown in the File view.

To save the document to a different location

1. Select **Edit > Copy to** from the menu.
2. Select where to save the document and select **Save**.

Functions specific for different document types

When a document is opened, the type is indicated by the name of the first menu, for example **Spreadsheet**.

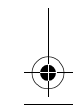
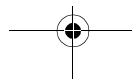
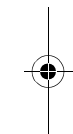


Detail view - Document

Menus	Option	Description
Document	Find	Search the document for a specific text.
	Find next	Search for the next occurrence of the search text.
	Clear search hits	Remove the search hits.
Edit	Copy	Copy the selected text or elements of the document.
	Select all	Select the contents of the entire document.
	Draft view	Display the document as formatted text without graphics, adapted to the screen.
	Normal view	Display the document as formatted text including graphics, adapted to the screen.
	Page view	Display the document in print preview, showing the complete layout.

To copy text from the document

1. Select the text to be copied. To select all text in the document, select **Edit > Select all**.
2. Select **Edit > Copy**.
3. The text is put into the clipboard and a message is displayed.



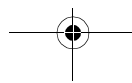
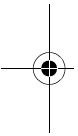


To search for a text in the document

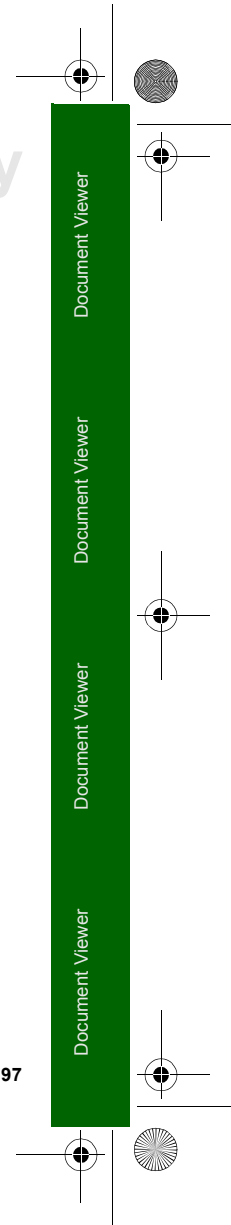
1. Select **Document > Find** from the menu.
2. Enter the text to search for.
3. Select find.
4. If required, select **Document > Find next**.
5. To clear the highlighted search hits, select **Document > Clear search hits**.

To change the document view

1. To display the document as formatted text without pictures, wrapped to the screen size, select **Edit > Draft view**.
2. To display the document as formatted text including pictures, wrapped to the screen size, select **Edit > Normal view**.
3. To display the complete layout of the document, select **Edit > Page view**.



Preliminary





Preliminary

Detail view - Spreadsheet

Menus	Option	Description
Spreadsheet	Find	Search the document for a specific text.
	Find next	Search for the next occurrence of the search text.
	Clear search hits	Remove the search hits.
Edit	Copy	Copy the selected text or elements of the document.
	Select all	Select the contents of the entire document.
	Draft view	Display the document as formatted text without graphics, adapted to the screen.
	Normal view	Display the document as formatted text including graphics, adapted to the screen.
	Page view	Display the document in print preview, showing the complete layout.
	Show gridlines	Turn the gridlines on/off.
	Next sheet	Open the view of the next sheet in the workbook.
Previous sheet	Open the previous sheet in the workbook.	

To copy text from the document

1. Select the text to be copied. To select all text in the document, select **Edit > Select all**.
2. Select **Edit > Copy**.
3. The text is put into the clipboard and a message is displayed.

To search for a text in the document

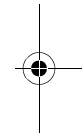
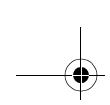
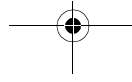
1. Select **Document > Find** from the menu.
2. Enter the text to search for.
3. Select find.
4. If required, select **Document > Find next**.
5. To clear the highlighted search hits, select **Document > Clear search hits**.

To change the document view

1. To display the document as formatted text without pictures, wrapped to the screen size, select **Edit > Draft view**.
2. To display the document as formatted text including pictures, wrapped to the screen size, select **Edit > Normal view**.
3. To display the complete layout of the document, select **Edit > Page view**.

To show/hide the spreadsheet grid lines

1. Select **Edit > Show gridlines**.



Preliminary

To navigate in the workbook

1. To go to the next sheet in the workbook, select **Edit > Next sheet**.
2. To go to the previous sheet in the workbook, select **Edit > Previous sheet**.

Detail view - Drawing

Menus	Option	Description
Drawing	Find	Search the document for a specific text.
	Find next	Search for the next occurrence of the search text.
	Clear search hits	Remove the search hits.
Edit	Next slide	Open the view of the next slide in multi page documents.
	Previous slide	Open the view of the previous slide in multi page documents.

To search for a text in the document

1. Select **Document > Find** from the menu.
2. Enter the text to search for.
3. Select find.
4. If required, select **Document > Find next**.
5. To clear the highlighted search hits, select **Document > Clear search hits**.

To navigate in a multi page drawing

1. To go to the next slide in the drawing, select **Edit > Next slide**.
2. To go to the previous slide in the drawing, select **Edit > Previous slide**.

Detail view - Archive

Menus	Option	Description
Edit	Open	Open the selected file for viewing in a Document viewer window.
	Extract	Extract the selected file to be saved in a selected folder.
	Extract all	Extract all the archive files to be saved in a selected folder.
	Sort by	Allow the user to view files in an archive by name, date, or size.
	Sort order	Allow the user to view files in ascending or descending order.

To extract documents from an archive

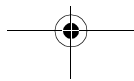
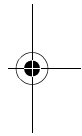
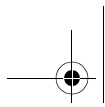
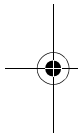
1. To open a file for viewing in the Document viewer, select the file and select **Edit > Open**.
2. To extract a file and save it in the selected folder, select **Edit > Extract**.
3. To extract all files in the archive and save them in the selected folder, select **Edit > Extract all**.

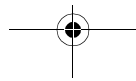
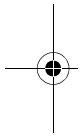


Preliminary

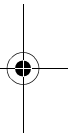
To change the archive sort order

1. To sort the documents by name, date or size, select **Edit > Sort by** and select as desired.
2. To change between ascending and descending order, select **Edit > Sort order**.





Preliminary



Document Viewer
Document Viewer
Document Viewer
Document Viewer



Preliminary Video player

You can view video clips that you have saved in your smartphone. The video clips can be downloaded in the smartphone from an Internet site or transferred from a computer via a cable. It is also possible to send these video clips to other phones or pc's, via infrared communication, Bluetooth wireless technology and MMS.

The video player supports the MPEG4 file format.

To download a video

- 1.

To view a video clip

1. Select Applications > Video.
- 2.

To send a video clip

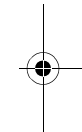
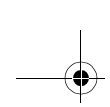
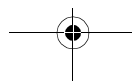
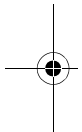
- 1.

To delete a video clip

- 1.

To rename a video clip

- 1.
- 1.



B

Battery

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Problem

- card blocked 161
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- memory/disk full 162
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S

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