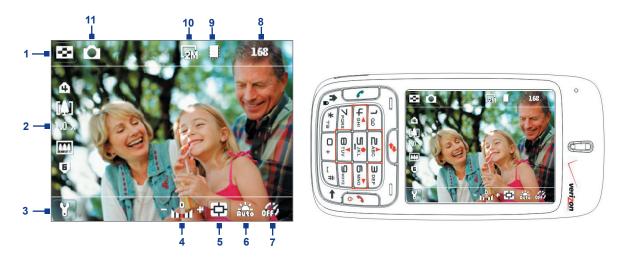
Using the above capture modes, the camera captures files in the following formats:

Capture type	Format
Still Image	JPEG
Video	Motion-JPEG (.avi) MPEG-4 (.mp4) H.263 baseline (.3gp) 3GPP2 (.3g2)
MMS Video	MPEG-4 (.mp4) H.263 baseline (.3gp) 3GPP2 (.3g2)

Camera mode icons and indicators

The Camera [Photo] screen



- 1 Picture Viewer. Click the left SOFT KEY to view the picture or video in Pictures & Videos.
- 2 Zoom-ratio. Indicates the current zoom ratio. Press NAVIGATION up/down or press the number keys as indicated to increase or decrease the zoom level.
- **3 Camera Settings**. Click the right SOFT KEY to open the Camera Settings screen.
- 4 Exposure Value (EV). Allows you to set brightness by adjusting the exposure value from -2 EV to +2 EV (increments of 0.5) by pressing NAVIGATION left/right or using the number keys as indicated.
- **5 Metering Mode.** Indicates the current metering mode.
- **6** White Balance. Indicates the current white balance setting. 畿: Auto; \$\mathbb{C}: Daylight; &: Night; \$\mathbb{C}: Incandescent; \$\mathbb{M}: Fluorescent.
- 7 **Self-timer.** Indicates the current self-timer setting while capturing images. Choose the self-timer setting (Off, 2 seconds, or 10 seconds) from the Camera Settings screen.
- 8 Remaining Information Indicator. In Photo, Contacts Picture, Picture Theme, Panorama, and Sports, this shows the remaining, available shots of pictures that you can take based on the current settings. In Video and MMS Video modes, this shows the remaining duration that can be recorded. While recording video, this shows the recorded duration.
- **9 Storage.** Indicates where the captured images and video clips will be saved. The icon indicates the phone's main memory; the icon indicates the storage card.
- 10Resolution. Indicates the current image or video size based on the resolution you chose. For the list of available resolutions, see "Use zooming."
- **11Capture mode.** Indicates the current capture mode.

The Camera [Video] screen

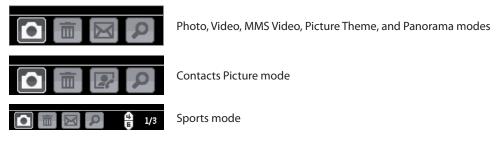


The Camera [Picture Theme] screen



The Review screen

After capturing image or recording video, the Review screen appears allowing you to decide the action for the image/video.



lcon	Function
	Back. Click to go back to Camera screen.
面	Delete. Click to remove the captured image or video clip.
\square	Send. Click to send the captured image or video clip to someone via e-mail or MMS.
ρ	View. Click to switch to Pictures & Videos to show the still image, or switch to Windows Media Player to play back the video clip.
	Assign to Contacts. Click to associate the photo to a selected contact.

Note After you have taken photos in **Sports** mode, the total number of consecutive shots is shown at the lower right corner of the Review screen. Press NAVIGATION CONTROL up/down or use number keys as indicated to browse through the sequence of photos.

While using Still Image capture modes, such as Photo, Contacts Picture, Picture Theme, and Panorama, you can capture a single still image by pressing ENTER. In Sports mode, press ENTER once, and then pan your phone to take the consecutive shots. The number of shots taken depends on the option you set. Still images are captured and saved in the JPEG format.

While capturing an image in the Picture Theme mode, you can select a preset template. To browse and choose from different templates, click the right SOFT KEY on the Camera screen, and then use the NAVIGATION CONTROL to select. Depending on the chosen template, one or more photos may need to be taken for the template.

Use Video capture mode

While using the Video capture mode, press ENTER to start recording a video clip (with audio if desired). To stop recording, press ENTER again. Your phone displays the first frame of the captured video clip by default on the Review screen.

Before you capture a video clip, click the right SOFT KEY and then select > Capture Format to specify the file format. You can set the encoding format to Motion-JPEG, MPEG4, H.263, or 3GPP2. You can also specify the recording limit in terms of time or file size by pressing the right SOFT KEY then selecting > Recording Limit. To change the video resolution, click the right SOFT KEY and then select .

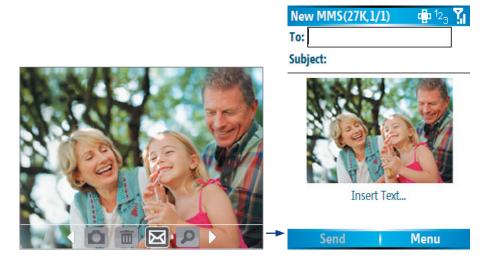
Use MMS Video capture mode

While using the MMS Video capture mode, press ENTER to start recording a video clip (with audio if desired). To stop recording, press ENTER again.

The recording length of MMS video is fixed. The recording automatically stops when the preset length is reached. However, you can manually stop recording the video anytime. The time indicator at the top-right side of the screen indicates the time limit.

You can specify the encoding format to be either H.263, MPEG4, or 3GPP2 by clicking the right SOFT KEY then selecting > Capture Format; however, the ideal format for MMS is H.263 (.3qp).

After you capture the video file, click the Send icon () to send the file through MMS.



Use zooming

Before capturing a still image or a video clip, you can first zoom in to make the object in focus move closer, and you can zoom out to make the object move farther away. In all capture modes, press NAVIGATION up on your phone to zoom in, NAVIGATION down to zoom out. You can also use the number keys as indicated to zoom in or out in any capture mode.

Experiencing Multimedia

The camera zoom range for a picture or video depends on the capture mode and capture size. The following table is a summary. Please note the capture sizes available for certain capture formats also vary from one capture mode to another. The zoom range has been calculated based on the following ratio:

Capture mode	Resolution	Zoom range
Video and MMS Video	Small (128 x 96) (4:3)	1.0x to 2.0x
	Medium (176 x 144) (11:9) (default)	1.0x to 2.0x
Photo	Small (160 x 120)	1.0x to 10.0x
	Medium (320 x 240)	1.0x to 4.0x
	Large (640 x 480)	1.0x to 2.0x
	1M (1280 x 960)	1.0x to 2.0x
	2M (1600 x 1200) (default)	No zooming
Contacts Picture	Small (120 x 160)	1.0x to 4.0x
	Medium (240 x 320)	1.0x to 4.0x
	Large (480 x 640) (default)	1.0x to 2.0x
Picture Theme	Determined by the current template	Depends on the size of the currently loaded
		template
Panorama	Small (160 x 120)	1.0x to 10.0x
	Medium (320 x 240)	1.0x to 4.0x
	Large (640 x 480) (default)	1.0x to 2.0x
Sports	Small (160 x 120)	1.0x to 10.0x
	Medium (320 x 240)	1.0x to 4.0x
	Large (640 x 480) (default)	1.0x to 2.0x

Use the Camera Menu

Clicking the right SOFT KEY on the Camera screen allows you to select various capture modes and customize various settings for each mode. Use the NAVIGATION CONTROL or the left SOFT KEY () to go through the available settings, and click **OK** when you are done. The following table provides a list of general options available in the menu.

Option	Allows you to
(3)	Select the Self-timer option for capturing images: Off , 2 seconds , or 10 seconds . Selecting 2 seconds or 10 seconds delays the capturing by the specified time after you press ENTER.
	Select whether to save the file in the device memory or on the memory card.
	Only available in Picture Theme mode. Allows you to select a template to use for Picture Theme mode.
4	Only available in Sports mode. The Capture Speed option determines the interval between shots. The Snapshots option determines how many shots to take with a single press of ENTER.
*	Specify the white balance setting, such as Auto , Daylight , Night , Incandescent , and Fluorescent to suit the lighting environment. You can also choose a special effect, such as Grayscale , Sepia , or Cool to apply to your photos or video clips.
	Choose the resolution to use and set the metering mode to either Center Area or Average . While capturing images, you can also set the Quality and enable Time Stamp .
	Switch between different capture modes, such as Photo, Video, Contacts Picture, and more. For details, see "Capture modes" earlier in this chapter.
Y.	Access more settings that lets you customize the Camera or Video Recorder functions. For details, see the following section "Advanced settings of the Camera Menu."

Advanced settings of the Camera Menu

- Capture Format. Specify the file format for the image/video.
- **Shutter Sound.** Choose whether or not you want the camera to make a shutter sound when you press ENTER to take photos or record video clips.
- **Keep Backlight**. Choose whether to turn the backlight on or off while using the camera. This overrides your device backlight settings while you are using the camera.
- Review Duration. Set a time length for displaying the captured image/video on the Review screen
 before automatically saving it and returning to the live Camera screen. Select No Limit if you do not
 want to impose a time limit.

- **Show control.** Select **On** or **Off** to display or hide the indicators on the Camera screen.
- **Flicker Adjustment.** When taking indoor shots, flicker on the camera screen may be caused by inconsistencies between the vertical scan rate of the camera display and the flicker frequency of fluorescent lighting. To reduce flicker, you can change the flicker adjustment setting to **Auto** or to the proper frequency (**50Hz** or **60Hz**) of the country where your device is being used.
- **Record with Audio** (Video and MMS Video only). Select **On** to record audio with the captured video clips. This is selected by default. If you select **Off** and then capture a video clip, it will have no audio.
- **Prefix.** Specify how to name captured images and video clips. When **Default** is selected, the file name of each new captured file is set to "IMAGE" or "VIDEO" followed by a sequential number, for example: IMAGE_001.jpg. You may also choose to name files using either the current **Date** or **Date & Time** as the prefix.
- Counter. By default, the newly captured image or video files are named with a prefix and some sequential numbers such as 001, 002, and so on. To reset the numbering to 001 for your captured files, select Reset.
- Recording Limit (Video and MMS Video only). Specify the maximum time or file size for recording.
- Template Folder (Picture Theme only). By default, templates are stored in the \My Documents\
 Templates folder on the device's Main Memory. If you transferred some templates to a storage card (via File Explorer), set this option to Main + Card to specify that templates are located in both the main memory and the storage card.
- Adjust. This option allows you to adjust the camera display properties, such as Contrast, Saturation,
 Hue, and Sharpness. Press NAVIGATION up or down to select the property, and press NAVIGATION left
 or right to change the value. You can also use the number keys as indicated to navigate and set options.
- **About.** Displays information about the Camera program.

7.2 Using Pictures & Videos

The **Pictures & Videos** program collects, organizes, and sorts images and video clips in the following formats on your phone.

File Type	File Extensions
Picture	*.bmp, *.jpg
GIF image and animation	*.gif
Video	*.avi, *.wmv, *.mp4, *.3qp, *.3q2

You can also view the pictures as a slide show, beam them, send them via a messaging program, edit them, or set them as the background on the Home Screen.

To copy a picture or video clip to your phone

You can copy pictures, GIF images, GIF animation files and video files from your PC and view them on your phone.

 Copy the pictures, GIF images, GIF animation files and video files from your PC or a storage card to the My Pictures folder on your phone. (You can also copy video files to the My Videos folder.)

For more information about copying files from your PC to your phone, see ActiveSync Help on your PC.

Note You can also copy pictures, GIF images, GIF animation files and video files from your PC to your phone using a memory card. Insert the memory card into the memory card slot on your phone, then copy the files from your PC to the folder you created on the memory card.



Pictures & Videos

To view pictures

- 1. On the Home screen, click **Start** > **Pictures & Videos**. The images in the My Pictures folder appear as thumbnails by default.
- 2. Select a picture and click View. If you cannot find a picture in the default My Pictures folder, click **Menu > Folders > My Device** to go to other folders.

To play GIF animation files

- 1. On the Home screen, click **Start** > **Pictures & Videos**.
- 2. Select the GIF animation file and click View.

To play videos

- 1. On the Home screen, click **Start** > **Pictures & Videos**. Video files appear as thumbnails with a with a ticon.
- 2. Select a video and click **Play** to play it with the built-in Windows Media Player.

To view slide shows

You can view your pictures as a slide show on your phone. Pictures are shown in full-screen view with 5second intervals between slides.

- 1. On the Home screen, click **Start** > **Pictures & Videos**.
- 2. Click Menu > Play Slide Show.

You can specify how pictures are scaled to optimize their display in a slide show. Click **Menu** > **Options**, select Slide Show, and choose either Portrait pictures or Landscape pictures. You can even set your phone to play a screensaver on its monitor while your phone is connected to the PC and idle for 2 minutes.

To start the camera from Pictures & Videos

• On the My Pictures folder, click Camera.

To delete a picture or video clip

• Select a picture or video clip on the Pictures & Videos screen, and click **Menu** > **Delete**. Click **Yes** to confirm the deletion.

To edit a picture

You can rotate, crop, and adjust the brightness and color contrast of your pictures.

- 1. On the Home screen, click **Start** > **Pictures & Videos**.
- 2. Select the picture you want to edit, click View.
- **3.** Click **Menu** > **Edit**, and do any of the following:
 - To rotate a picture 90 degrees, click **Menu** > **Rotate**.
 - To crop a picture, click Menu > Crop. Then, drag the cursor to position it on the first corner of the
 cropping area, and click Next. Select the second corner with the area to crop and click Finish, or
 click Previous to go back to the previous screen and select again.
 - To auto-adjust the brightness and contrast levels of a picture, click **Menu** > **Auto Correct**.
- **4.** Click **Menu** > **Save As** to save the edited picture with a new name or at a new location.

Note To undo an edit, click Menu > Undo. To cancel all unsaved edits you made to the picture, click Menu > Cancel.

To set a picture as the Home screen background

- 1. On the Home screen, click **Start** > **Pictures & Videos**.
- 2. Select the picture you want to set as the background.
- 3. Click View.
- 4. Click Menu > Use as Home Screen.
- 5. Select the display area and click **Next**.
- **6.** Adjust the transparency. Select a higher percentage for a more transparent picture, or a lower percentage for a more opaque picture.
- 7. Click Finish.

To send pictures and video clips via e-mail

You can send pictures and video clips to other phones via e-mail.

- 1. First, set up Messaging to send and receive messages.
- 2. On the Pictures & Videos screen, select the item you want to send.
- 3. Click Menu > Send.
- **4.** On the Messaging screen, select **Outlook E-mail** then click **Select**. A new message is created with the item attached.
- **5.** Enter the recipient name and subject, and click **Send**. The message will be sent the next time you synchronize your phone.

Note Pictures and video clips are saved automatically before they are sent.

To beam pictures

You can beam a picture to your friends or family using Bluetooth technology.

- 1. On the Home screen, click **Start** > **Pictures & Videos**.
- 2. Select the picture you want to beam.
- 3. Click Menu > Beam.
- **4.** Select the device to which you want to send the picture.
- 5. Click Beam.

You can assign a picture to a contact so that you can easily identify the contact at any time.

- 1. On the Home screen, click **Start** > **Pictures & Videos**.
- **2.** Select the picture you want to assign to a contact.
- 3. Click Menu > Save to Contact.
- 4. Select the contact, and click **Select**.

To customize picture options

- 1. On the Home screen, click **Start** > **Pictures & Videos**.
- 2. Select the picture for which you want to configure advanced options.
- 3. Click Menu > Options.
- **4.** Select **General** or **Slide Show** on the Options screen then press ENTER.
 - Selecting **General** on the Options screen allows you to do the following:
 - Decrease the picture size so that photos can be sent faster via e-mail.
 - Set the direction to rotate a picture.
 Selecting Slide Show on the Options screen allows you to do the following:
 - Configure the view settings during slide shows.
 - · Activate screensaver.



Pictures & Videos Menu

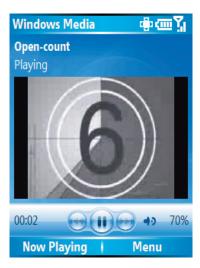
7.3 Using Windows Media Player

You can use Microsoft® Windows Media® Player Mobile for Smartphone to play digital audio and video files that are stored on your phone or on a network, such as on a Web site.

In this documentation, the version of Windows Media Player for Windows-based PCs is called the "desktop Player" and the version for Smartphone is called the "device Player."

To open Windows Media Player, click **Start** > **Windows Media**.

These are the following file formats that are supported by this version of Windows Media Player Mobile.



Windows Media Player

Formats Supported	File Extensions
Video	
 Windows Media Video 	.wmv, .asf
 MPEG4 Simple Profile 	.mp4
• H.263	.3gp
 Motion JPEG 	.avi
• 3GPP2	.3g2
Audio	
 Windows Media Audio 	.wma
• MP3	.mp3
• MIDI	.mid, .midi, .rmi
 AMR Narrow Band 	.amr
AMR Wide Band	.awb
• AAC	.m4a

About the controls

By default, these hardware buttons are assigned to Windows Media Player Mobile functions.

То	Press
Play or pause	ENTER
Skip to a previous file	NAVIGATION left
Skip to the next file	NAVIGATION right
Increase the volume	NAVIGATION up
Decrease the volume	NAVIGATION down
Turn the sound on or off quickly	#
(mute)	
Switch to full screen during video	0
playback	
Change rating	*
Fast-forward a file	NAVIGATION right (hold)
Rewind a file	NAVIGATION left (hold)

Note You can also use the keys on the QWERTY keyboard to control the Windows Media Player Mobile functions.

About the screens and menus

Windows Media Player has three primary screens:

Playback screen. The default screen that displays the playback controls (such as Play, Pause, Next, Previous, and Volume) and the video window. You can change the appearance of this screen by choosing a different skin.

Now Playing screen. The screen that displays the Now Playing playlist. This special playlist indicates the current file being played and files that are queued up to play next.

Library screen. The screen that lets you quickly find your audio files, video files, and playlists. It contains categories such as My Music, My Videos, My TV, and My Playlists.

At the bottom of each screen is a **Menu**. The commands on this menu vary, depending upon which screen you are viewing.

Playback screen menu

When you are viewing the Playback screen, these options appear on the **Menu**.

Option	Allows you to	
Library	Display the Library screen so you can choose a file to play.	
Play/Pause	Start or pause playback.	
Stop	Stop playback.	
Shuffle/Repeat > Shuffle	fle Play the items in the Now Playing playlist in random order.	
Shuffle/Repeat > Repeat	t Play the items in the Now Playing playlist repeatedly.	
Full Screen	When a video is playing, display it by using the entire screen.	
Options	Adjust various Windows Media Player Mobile options, including network, skin, and hardware button options.	
Properties	Display information about the currently playing file.	
About	Display information about Windows Media Player Mobile, such as the version number.	

Now Playing screen menu

When you are viewing the Now Playing screen, these options appear on the **Menu**.

Option	Allows you to	
Library	Display the Library screen so you can choose a file to play.	
Move Up	Move the selected item up in the playlist order.	
Move Down	Move the selected item down in the playlist order.	
Remove from Playlist	Remove the selected item from the playlist.	
Shuffle/Repeat > Shuffle	Play the items in the Now Playing playlist in a random order.	
Shuffle/Repeat > Repeat	Play the items in the Now Playing playlist repeatedly.	
Save Playlist	Save the Now Playing list as a personal playlist after you queue up the media files you want for your playlist, Your playlist will be saved inside the My Playlists folder in the Library.	
Clear Now Playing	Remove all items from the Now Playing playlist.	
Error Details	View error information about the selected item (an exclamation mark appears before the item name if error details are available).	
Properties	View information about the selected file.	

Library screen menu

When you are viewing the Library screen, these options appear on the **Menu**.

Option	Allows you to
Queue Up	Add the selected item to the end of the current (Now Playing) playlist.
Delete from Library	Delete the selected item from the library.
Now Playing	Display the Now Playing playlist.
Library > library name	Switch between libraries, such as between My Device and Storage Card .
Update Library	Add new items to the library by searching your phone or storage card.
Open File	Find and play files that are stored on your phone or storage card but in the library.
Open URL	Play a file on a network, such as the Internet.
Properties	View information about the selected file.

About licenses and protected files

Some content (such as digital media files downloaded from the Internet, CD tracks, and videos) have associated licenses that protect them from being unlawfully distributed or shared. Licenses are created and managed by using digital rights management (DRM), which is the technology for securing content and managing its access rights. Some licenses may prevent you from playing files that have been copied to your phone. Files that have licenses associated with them are called "protected files."

If you want to copy a protected file from your PC to your phone, use the desktop Player to synchronize the file to your phone (instead of dragging the file from a folder on your PC to a folder on your phone, for example). This will ensure that the license is copied along with the protected file. For more information about synchronizing files to your phone and other mobile devices, see the desktop Player Help.

Note You can view the protection status for a file by checking its file properties (**Menu** > **Properties**).

Copy files to your phone

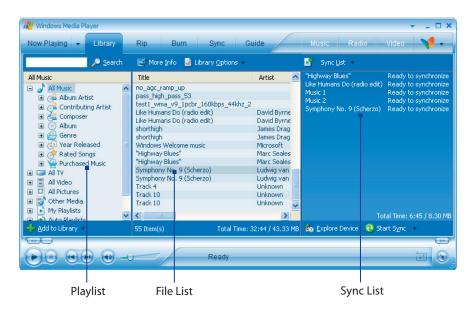
Use the **Sync** feature in the desktop version of Windows Media Player to synchronize (copy) digital media files from your PC to your phone. Using **Sync** ensures that protected files and album art (for skins) are copied to your phone correctly.

To synchronize content to your phone automatically

- 1. On your PC, start Windows Media Player.
- 2. Insert a 32MB or larger storage card into your phone, and then connect your phone to your PC.
- **3.** If you have not set up synchronization between your phone and PC, the Device Setup Wizard opens on your PC.
- **4.** In the wizard, click **Automatic**, select the **Customize the playlists that will be synchronized** check box, and then select the playlists that you want to synchronize.
- 5. Click Finish.
- **6.** The files begin synchronizing to your phone. The next time you connect your phone to your PC while the desktop version of Windows Media Player is running, synchronization will start automatically.

To synchronize and copy content manually to your phone

- 1. If you have not set up synchronization between your phone and PC, follow steps 1 to 5 in "To synchronize content to your phone automatically", except that you should click **Manual** synchronization.
- 2. To choose files to synchronize and copy to your phone, do the following:
 - Click the **Library** tab.
 - In the rightmost pane, click the drop-down list and select **Sync List**.
 - In the Playlist which is the leftmost pane, select a desired playlist.



- In the File List which is the middle pane, multi-select desired files then drag them to the Sync List.
- Click the **Start Sync** button found at the bottom of the Sync List.

- Notes
 - · Always use the desktop version of Windows Media Player 10 to synchronize (copy) files to your phone. For example, do not use Windows Explorer to drag and drop files from your computer to your phone.
 - · Always synchronize files to a storage card that is inserted into your phone. Do not synchronize to a storage card that is inserted into a storage card reader.
 - Audio files copy faster if the desktop Player is configured to automatically set the quality level for audio files copied to your phone. For more information, see the desktop Player Help.
 - The desktop version of Windows Media Player 10 is only available for computers running Windows XP. If you are not running Windows XP on your PC, use the Copy to CD or Device feature of Windows Media Player 9 Series to copy your audio files and video files to your phone.
 - The desktop version of Windows Media Player 9 Series is not as full-featured as the desktop version of Windows Media Player 10. For example, the desktop version of Windows Media Player 9 Series does not support automatic synchronization, synchronization of playlists, synchronization of album art, or synchronization of TV shows recorded by computers running Windows XP Media Center Edition.
 - For more information about the **Copy to CD or Device** feature, start the desktop version of Windows Media Player 9 Series, and then press F1.

Play media

To play media on your phone

Use the library to find and play songs, videos, and playlists that are stored on your phone or removable storage card.

- 1. If you are not on the Library screen, click **Menu** > **Library**.
- 2. If necessary, on the Library screen, click **Menu** > **Library**, and then select the library that you want to use (for example, **Storage Card**).
- 3. In most cases, Windows Media Player Mobile automatically updates the library. However, you can manually update the library to ensure that it contains new files that you recently copied to your phone or storage card. Click **Menu > Update Library** to manually update the library list.
- 4. Select a category (for example, My Music or My Playlists), select the item that you want to play (such as a song, album, or artist name), and then click **Play**.

Note To play a file that is stored on your phone but is not in a library, on the Library screen, click **Menu** > **Open File**. Select the item that you want to play (such as a file or a folder), and click Play.

To play media on a network

Use the **Open URL** command to play a song or video that is stored on the Internet or on a network server.

- 1. If you are not on the Library screen, click **Menu** > **Library**.
- 2. Click Menu > Open URL.
- **3.** Do one of the following:
 - In URL, enter a network address.
 - In **History**, select a URL that you have previously used.

Note To play media on a network, your phone must be connected to a network.

Change Player appearance

You can change the appearance of the Playback screen by choosing a new skin.

- 1. If you are not on the Playback screen, press BACK to display the Playback screen.
- 2. Click Menu > Options > Skins.

- 3. To select a skin, press NAVIGATION left or right until you find the skin that you want to use.
- 4. Click Done.

Notes

- To download new skins, see the WMplugins.com site (http://www.wmplugins.com).
- After downloading a skin to your computer and unzipping it if necessary, use ActiveSync to copy the .skn and
 .bmp files to your phone (such as to the location, Smartphone\Program Files\Windows Media Player, on the
 phone). To ensure that skins appear on the Skins tab, do not store skin files in the Windows folder on your phone.

Troubleshooting

If you encounter any difficulty while using Windows Media Player Mobile, a number of resources are available on the Web to help you troubleshoot the issue, including a list of frequently asked questions (FAQ).

For more information, see the Troubleshooting Windows Media Player Mobile page at the Microsoft Web site (http://www.microsoft.com/windows/windowsmedia/player/windowsmobile/troubleshooting.aspx).

7.4 Using Streaming Media

The Streaming Media program allows you to stream live broadcasts or on-demand media content from the Web. You do not have to wait until the entire media content is completely downloaded before watching the video or hearing the sound. The media is sent in a continuous stream to your phone and is played as it arrives, along with the audio.



Button control	Function
1. Play/Pause	Press the ENTER button to play/pause playback.
2. Stop	Press NAVIGATION left to stop playback.
3. Volume	Press NAVIGATION up/down to increase/decrease volume.
	Press NAVIGATION right to mute/unmute the audio.

The Streaming Media program allows you to play **3GP** and **MPEG-4** files. It also supports playback of **SDP** (Session Description Protocol) files. An SDP file is a text file that contains the format, broadcast times, media content, and other information about a live broadcast, or it may contain a playlist and links to prerecorded media files if you are viewing on-demand streaming media.

To access streaming content via Internet Explorer

In Internet Explorer, you can open a Web page containing http links to streaming media content and play the content in the Streaming Media program.

- 1. Click Start > Internet Explorer.
- 2. Click **Menu** > **Address Bar**. In the address bar, enter the URL address of the Web page that contains the http link to the desired *.3gp, *.mp4, or *.sdp file.
- 3. On the Web page, select the RTSP link and press the ENTER button.
- **4.** Streaming Media then automatically opens and starts playing the file. During playback, use the button controls to play/pause the video and adjust the sound volume.

To stream media files directly on the Streaming Media Player

Streaming Media only supports RTSP links when you stream *.3gp and *.mp4 files directly on the program.

Note Before you launch the Streaming Media program, make sure that you are connected to the Internet.

- 1. Click Start > Streaming Media.
- **2.** From the program, click **Connect**.
- 3. Enter the URL for the Web site (rtsp://) and the file name.
- 4. Click Go.
- **5.** Streaming Media then starts playing the file. During playback, use the button controls to play/pause and adjust the sound volume.

To view streaming video file information

You can view the properties and general information of a streaming video clip, such as file format, audio codec, dimension, frames, and duration of the video.

• Click **Menu > Properties** from the program.

To configure streaming video connection settings

Click **Menu** > **Options** to configure the following settings:

- **Connect via**. Choose whether you want to connect to the Internet or corporate network (intranet) to locate a streaming video clip.
- **UDP port range**. Specify a range of port numbers to use for streaming.
- **Media buffer**. Specify the memory space (in terms of duration) to allot for storing video and audio data while streaming media.

7.5 Using MIDlet Manager

MIDlets are Java-based applications that can run on mobile devices. Your phone supports Java 2 Edition, J2ME. The MIDlet Manager allows you to download Java-based applications, such as games and tools that are specifically designed for mobile devices. The Java MIDlet Manager gives you the flexibility of installing and managing additional J2ME applications from the Internet.

To install MIDlets from the Internet

- On the Home screen, click Start > MIDlet Manager.
 The Java Apps screen appears.
- 2. Click Menu > Install > Browse to open Internet Explorer Mobile.
- 3. Locate the MIDlet/MIDlet suite while connected to the Internet.
- 4. Select the MIDlet/MIDlet suite to download.
- **5.** To start installing the MIDlet/MIDlet suite, click **Yes**.
- **6.** Click **Done** to confirm the installation.

Notes

- You can cancel the installation at any time.
- Downloaded MIDlets will be automatically saved in the My Documents folder.

To install MIDlets from a PC

You can install the MIDlets/MIDlet suites on your phone from a PC using the USB sync cable or Bluetooth. MIDlets copied to your phone using Bluetooth or e-mail attachments are automatically saved in the My Documents folder. However, you can copy the MIDlet file(s) from a PC to any of the following temporary folders on your phone from where MIDlet Manager can install them.

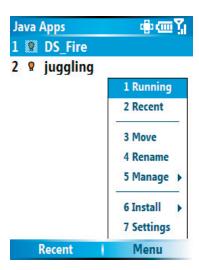
- Device memory: ../Smartphone/My Documents/My MIDlets
- Storage card: ../Smartphone/Storage Card

Note If the My MIDlets folder does not exist in My Documents, you can create one with the same folder name. However, a folder named Storage Card automatically appears after you insert a storage card into your phone.

To install MIDlets from a local folder

- On the Home screen, click Start > MIDlet Manager.
 The Java Apps screen appears.
- 2. Click **Menu** > **Install** > **Local** to install the MIDlets currently saved in the My MIDlets folder. Click **Recent** to view the MIDlets or a MIDlet suite used recently on your phone.
- 3. Select the MIDlet/MIDlet suite from the list using the NAVIGATION CONTROL.
- 4. Click Menu > Install.
- 5. Click **Yes** to install.
- 6. Click **Done** to confirm the installation.

Note To remove the MIDlet files from the default folder, click **Menu** > **Delete**.



MIDlet Manager

To run MIDlets on your phone

- On the Home screen, click Start > MIDlet Manager.
 The Java Apps screen appears.
- 2. Select a MIDlet from the list using the NAVIGATION CONTROL.
- 3. Press ENTER to run the MIDlet.

To view the MIDlets currently running

• On the MIDlet Manager Java Apps screen, click **Menu** > **Running**.

Note To view the most recently used MIDlets, click **Menu** > **Recent**.

To stop running a MIDlet

- On the Home screen, click Start > MIDlet Manager.
 The Java Apps screen appears.
- 2. Click Menu > Running.
- **3.** Select a MIDlet on the Running MIDlets screen, and click **Menu** > **Stop**.

Note To stop all MIDlets currently running on your phone, click **Menu** > **Stop All**.

Manage MIDlets

You can organize the MIDlets into groups and define custom groups. You can also change the default display settings for a MIDlet.

To customize the display settings

- On the Home screen, click Start > MIDlet Manager.
 The Java Apps screen appears.
- 2. Click Menu > Settings.
- 3. On the Settings screen, select Display Options using the NAVIGATION CONTROL.
- 4. Press ENTER.
- 5. In **View Options**, choose to display the MIDlets either in groups or all at once.
- 6. In Sort Options, choose to sort by Name or by Size.
- 7. Click Done.

To change the display name of a MIDlet

- On the Home screen, click Start > MIDlet Manager.
 The Java Apps screen appears.
- 2. Select a MIDlet using the NAVIGATION CONTROL.
- 3. Click Menu > Rename.
- 4. Enter a new name for the MIDlet.
- 5. Click Done.

Note You cannot change the name of a MIDlet suite.

To uninstall a MIDlet

Before you uninstall a MIDlet/MIDlet suite, make sure that it is not running.

- 1. On the Java Apps screen, select the MIDlet/MIDlet suite using the NAVIGATION CONTROL.
- 2. Click Menu > Manage > Uninstall.
- 3. Click OK to confirm.

Note You cannot uninstall a single MIDlet from a MIDlet suite; you must uninstall the complete MIDlet suite.

To check storage space

- 1. On the Home screen, click **Start** > **MIDlet Manager**.
- **2.** Select a MIDlet using the NAVIGATION CONTROL.
- 3. On the Java Apps screen, click **Menu** > **Settings**.

- 4. On the Settings screen, select **System Info** using the NAVIGATION CONTROL.
- **5.** Press ENTER to see how much phone storage space is used by the MIDlet.
- 6. Click OK.

To select a network type

- 1. On the Java Apps screen, click **Menu** > **Settings**.
- 2. Select **Choose Network Type** using the NAVIGATION CONTROL.
- 3. Choose a network type from the list.
- 4. Click Select.

To configure MIDlet security

You can adjust security settings for each MIDlet/MIDlet suite.

- 1. On the Java Apps screen, select a MIDlet using the NAVIGATION CONTROL.
- 2. Click Menu > Manage > Security.
- 3. Configure the security options, such as Local Connectivity, App Auto Run, Messaging, and so on.

Please note that some features may not be available for all MIDlets/MIDlet suites. Following are the security options that you can set for a running MIDlet/MIDlet suite.

Security Option	Description
Net Access	Determines whether a MIDlet/MIDlet suite can access the Internet.
Local Connectivity	Enables a MIDlet/MIDlet suite to access services, such as Bluetooth.
App Auto Run	Enables a MIDlet/MIDlet suite to run at specified times, or any time.
Messaging	Determines whether a MIDlet/MIDlet suite can send and/or receive text (SMS) messages.
Multimedia Recording	Enables a MIDlet/MIDlet suite to record sounds and images.

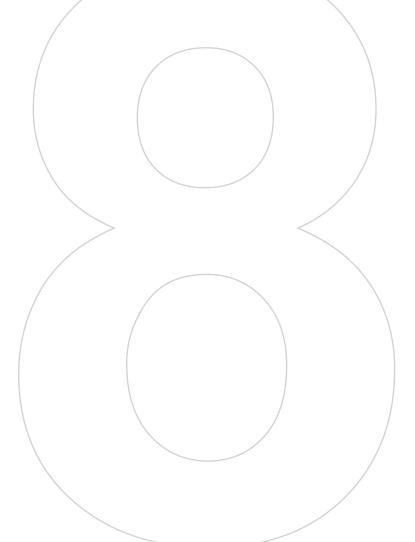
Error messages

The following is a list of error messages that you may receive while managing and using MIDlets/MIDlet suites on your phone.

Error Message	Description
Either RAM shortage, or insufficient space on the file system.	There is insufficient memory on your phone.
Network out.	There is no network connection available.
The jar size does not match that specified in the jad.	The installation information provided by the MIDlet manufacturer is inaccurate.
The jar manifest does not match the jad.	The installation information provided by the MIDlet manufacturer is inaccurate.
Invalid Java application descriptor (jad).	There is a problem with the installation file provided by the MIDlet manufacturer.
Invalid Java archive (jar).	There is a problem with the installation file provided by the MIDlet manufacturer.
This Java application is not compatible with this device.	One or more features required by this MIDlet is not available on your phone.

Chapter 8Using Other Applications

8.1 Using Doc Viewer8.2 Using Speed Dial8.3 Using Voice Speed Dial



8.1 Using Doc Viewer

Doc Viewer consists of four programs that let you view various types of documents, such as Word documents, Powerpoint presentation files, Excel worksheets, and Acrobat PDF files. Doc Viewer consists of the following programs:

- ClearVue Presentation (displays PowerPoint files)
- ClearVue Worksheet (displays Excel files)
- ClearVue Document (displays Word files)
- Adobe Reader LE (displays Acrobat PDF files)

To access Doc Viewer, click **Start > Doc Viewer**, then locate the program you want to open.

Note Not all fonts, colors, features, and versions of the desktop versions of PowerPoint, Word, Excel, and Acrobat are supported, but these programs will show a close approximation.

ClearVue Presentation

ClearVue Presentation is a complete PowerPoint viewer solution with the ability to view native PowerPoint presentations. With ClearVue Presentation, you will see the original presentation complete with animations and transitions.

Note ClearVue Presentation only supports Powerpoint files created in Office 97 or later versions.

To open a presentation file

- 1. Click File > Open, and then locate the .ppt or .pps file.
- 2. Click Open.

To change the view

ClearVue Presentation lets you view your presentation file in 3 modes. Click **View**, and then select **Normal**, **Slide Sorter**, or **Notes**.

- **Normal**. Displays a large single image of the current slide and below it, small thumbnail images of other slides in the presentation.
- Slide Sorter. Slides will be displayed as small thumbnails.
- Notes. Lets you to view any slide notes that might have been stored in the original presentation.

To change the zoom ratio of the view mode

• Click View > Scale.

Note This only applies to **Normal** and **Notes** view modes.

To set up your presentation show

- 1. Click View > Set Up Show.
- 2. In Advance Slides, select how you want to advance to the next slide.
 - Manually. Press NAVIGATION right to advance through the slides.
 - **Use timings**. Uses the timing information stored in the PowerPoint file to determine when to display the next slide.
 - Automatically. Automatically advances to the next slide based on the time set in after __ secs.
- **Tip** Click **Loop continuously** to loop the presentation. You need to manually stop the presentation. To learn how to stop the presentation, see "To view your presentation."

- **3.** Select the **Orientation** when viewing the presentation.
- **4.** Click **Black slide at end** to add a blank slide after the last slide in the presentation.

To set up a custom show

- 1. Click View > Custom Show.
- 2. In **Show List**, select the slide you want to edit, and then click **Menu**. In the Menu options, you can choose to either add, delete, hide, move up or move down the slide.

Tip Click **Reset** to revert the presentation back to its original state.

To view your presentation

Click View > View Show.

Tip While viewing the presentation, press the # key to open a menu which allows you to go to the next slide or previous slide of your presentation, go to a specific slide or end the presentation.

ClearVue Worksheet

ClearVue Worksheet gives you the ability to view native Excel worksheets. It also lets you view embedded charts and chart sheets as well.

Notes

- ClearVue Worksheet only supports Excel files created in Office 97 or later versions.
- Excel macros that might be in the original file will not run when loaded.
- Three-dimensional charts will be mapped into a two-dimensional space.
- Worksheet does not display images selected as a background in an AutoShape.
- Worksheet cannot open files that have been password protected using the "Save Options" password setting in Microsoft Excel.

To open a worksheet file

- 1. Click **File** > **Open**, and then locate the .xls file.
- 2. Click Open.

To change the zoom ratio

• Click View, and then select a magnification.

To view another sheet in your worksheet file

Click View > Sheet, and then select the sheet you want to view.

ClearVue Document

ClearVue Document lets you view Word documents, complete with tables, images, columns, bulleted lists, and more.

Note ClearVue Document only supports Word files created in Office 97 or later versions.

To open a document file

- 1. Click File > Open, and then locate the .doc or .rtf file.
- 2. Click Open.

After you open a file in ClearVue Document, it initially displays using the default **Page Width** setting. This means that the page is sized to fit within the available area of your phone's screen.

Click **Zoom** to change the magnification as desired, then scroll through and view the document using the NAVIGATION CONTROL on your phone.

Adobe Reader LE

Adobe Reader LE allows you to open and view Portable Document Format (PDF) files. These files usually have a *.pdf file extension.

Adobe Reader LE supports password-protected PDF files with up to 128-bit encryption. When you open a password-protected PDF file, you will be prompted to enter the password before the file can be opened.

To open a PDF file on your phone

- 1. Click Start > Doc Viewer > Adobe Reader LE.
- 2. Click Open.
- 3. Browse to a folder and select the PDF file you want to view.

Note To open another PDF file, click **Open > Menu > Browse For File**. You can also open a PDF file from File Explorer by clicking it.

To navigate through a PDF file

Do any of the following:

- Press NAVIGATION up, down, right, and left to move up or down a page.
 You can also use the press or left to move up or down a page.
- Click **Menu** > **Go To** and select an option to go to a specific page in the PDF file.

To enlarge or reduce the display size

- 1. Open a PDF file you want to view.
- 2. Click Menu > Zoom.
- 3. Select In, Out, or To% to enlarge or reduce the display size. Otherwise, select Fit Screen or Fit Width.

To customize page view and orientation

- 1. Open a PDF file you want to view.
- 2. Click Menu> View.
- **3.** Select an option to suit your view.

To find text in a PDF file

- 1. Open a PDF file you want to view.
- 2. Click Menu > Find > Text.
- 3. Enter the text to be searched.
- 4. Choose search parameters, such as Match case, Whole word, Backwards, and finally tap Find.

To go to a bookmark in a PDF file

This option is only available if the PDF file contains bookmarks.

- 1. Open a PDF file you want to view.
- 2. Click Menu > Bookmarks.
- 3. Use the NAVIGATION CONTROL to select the bookmark you want to go to and click **Select**.

8.2 Using Speed Dial

You can create speed dial entries for frequently-called numbers or frequently-accessed items so you can dial a number or access an item by pressing a single key.

To create a speed dial entry for a contact

- 1. On the Home screen, click Start > Contacts.
- 2. Select a contact.
- 3. Press ENTER to view the contact details.
- 4. Select the desired phone number and click Menu > Add to Speed Dial.
- **5.** Enter appropriate details in Name, Value, and Keyboard assignment.
- **6.** Click **Done**. To quit at any time during this process, click **Menu** > **Cancel**.

Note Speed dial entries can be created only for numbers that are stored in Contacts.

To create a speed dial entry for an item

- 1. On the Home screen, click **Start** then choose (just highlight) the item you want.
- 2. Click Menu > Add Speed Dial.
- **3.** Enter details in Name, Value, and Keyboard assignment.
- **4.** Click **Done**. To quit at any time during this process, click **Menu** > **Cancel**.

Note The first speed dial location is generally reserved for your voice mail. Speed Dial uses the next available location by default. If you want to place a number in a location that is already used, the new number replaces the existing number.

To retrieve a voice mail message

• On the Home screen, press and hold 1 to access your voice mailbox, and follow the prompts to retrieve your messages.

To make a call or launch a program using Speed Dial

• If you have assigned a speed dial (for example, the second location) to a contact or a program in Speed Dial, you can simply press and hold the 2 key on the phone keypad to dial the contact's number or open the program.

To delete a speed dial entry

- 1. On the Home screen, click **Start** > **Speed Dial**.
- 2. Select the desired entry and click **Menu** > **Delete**.

8.3 Using Voice Speed Dial

You can record a voice tag for a phone number, e-mail address, or Web page address that is stored in Contacts. When you speak out the voice tag using Voice Speed Dial, your phone automatically dials the associated phone number, opens an e-mail message using the associated address, or goes to the associated Web page.

To create a voice tag for a phone number, e-mail address, or URL in Contacts

- 1. On the Home screen, click Start > Contacts.
- 2. Select the desired contact, and press ENTER to open the contact card.
- 3. Select the item to which you want to assign a voice tag.
- 4. Click Menu > Add Voice Tag.
- **5.** After a "beep" sound, begin recording the voice tag (preferably one easy-to-recognize word).
- 6. When the voice tag is successfully trained, the phone will play back the voice tag. Click OK.
- 7. Enter appropriate details in Name, Value, and Keyboard assignment
- Click **Done** to save the new voice tag.To quit at any time during this process, click **Menu** > **Cancel**.

To create a voice tag for a program

To create a voice tag for a program, for example, Calendar, do the following:

- 1. On the Home screen, click **Start** > **Calendar**. (Do not press ENTER when Calendar is selected.)
- 2. Click Menu > Add Voice Tag.
- 3. After the message/beep, say "Calendar."
- 4. When the voice tag is successfully trained, the phone will play back the voice tag. Click OK.
- **5.** Enter appropriate details in Name, Value, and Keyboard assignment. Click **Done** to save the new voice tag. To quit at any time during this process, click **Menu** > **Cancel**.

To make a call or launch a program using the voice tag

- 1. Click Start > Voice Speed Dial.
- 2. After a "beep" sound, say the recorded voice tag that you have assigned to the phone number you want to call or the program you want to launch. The phone plays back the voice tag and then dials the number or launches the associated program.

Note You can also drag and hold the Volume Adjustment Slider down to launch Voice Speed Dial and record voice tags for numbers, e-mail addresses, URL in Contacts, and programs.

Tip If the phone cannot recognize your voice tag, please try again and speak clearly and reduce the surrounding noise.

To edit, delete, and play voice tags

- 1. On the Home screen, click **Start** > **Speed Dial**.
- 2. Select the desired voice tag from the list.
- **3.** Do any of the following:
 - To change the voice tag, click **Menu** > **Edit**, make changes, and click **Done**.
 - To delete the voice tag, click **Menu** > **Delete**.

To play back an existing voice tag at any time, click **Menu** > **Play Voice Tag**.

Appendix

A.1 Regulatory Notices

A.2 PC Requirement to Run ActiveSync 4.x

A.3 Specifications

A.1 Regulatory Notices

Regulatory Agency Identifications

For regulatory identification purposes, your product is assigned a model number of LIBR100.

To ensure continued reliable and safe operation of your device, use only the accessories listed below with your **LIBR100**.

The Battery Pack has been assigned a model number of LIBR160.

This product is intended for use with a certified Class 2 Limited Power Source, rated 5 Volts DC, maximum 1 Amp power supply unit.

Federal Communications Commission Compliance

• FCC Part 15.21

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

FCC ID: NM8LIBR100

FCC Part 15.19

"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."

• FCC Part 15.105 (b)

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- · Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

FCC Hearing-Aid Compatibility (HAC) Regulations for Wireless Devices

On July 10, 2003, the U.S. Federal Communications Commission (FCC) Report and Order in WT Docket 01-309 modified the exception of wireless phones under the Hearing Aid Compatibility Act of 1988 (HAC Act) to require digital wireless phones be compatible with hearing-aids. The intent of the HAC Act is to ensure reasonable access to telecommunications services for persons with hearing disabilities.

While some wireless phones are used near some hearing devices (hearing aids and cochlear implants), users may detect a buzzing, humming, or whining noise. Some hearing devices are more immune than others to this interference noise, and phones also vary in the amount of interference they generate.

The wireless telephone industry has developed a rating system for wireless phones, to assist hearing device users find phones that may be compatible with their hearing devices. Not all phones have been rated. Phones that are rated have the rating on their box or a label located on the box.

The ratings are not guarantees. Results will vary depending on the user's hearing device and hearing loss. If your hearing device happens to be vulnerable to interference, you may not be able to use a rated phone successfully. Trying out the phone with your hearing device is the best way to evaluate it for your personal needs.

M-Ratings: Phones rated M3 or M4 meet FCC requirements and are likely to generate less interference to hearing devices than phones that are not labeled. M4 is the better/higher of the two ratings.

Hearing devices may also be rated. Your hearing device manufacturer or hearing health professional may help you find this rating. Higher ratings mean that the hearing device is relatively immune to interference noise. The hearing aid and wireless phone rating values are then added together. A sum of 5 is considered acceptable for normal use. A sum of 6 is considered for best use.



In the above example, if a hearing aid meets the M2 level rating and the wireless phone meets the M3 level rating, the sum of the two values equal M5. This should provide the hearing aid user with "normal usage" while using their hearing aid with the particular wireless phone. "Normal usage" in this context is defined as a signal quality that is acceptable for normal operation.

The M mark is intended to be synonymous with the U mark. The T mark is intended to be synonymous with the UT mark. The M and T marks are recommended by the Alliance for Telecommunications Industries Solutions (ATIS). The U and UT marks are referenced in Section 20.19 of the FCC Rules. The HAC rating and measurement procedure are described in the American National Standards Institute (ANSI) C63.19 standard.

For information about hearing aids and digital wireless phones

FCC Hearing Aid Compatibility and Volume Control: http://www.fcc.gov/cgb/dro/hearing.html
Gallaudet University, RERC: http://tap.gallaudet.edu/DigWireless.KS/DigWireless.htm
Self Help for Hard of Hearing People Inc. [SHHH]: www.hearingloss.org/hat/TipsWirelessPhones.htm
The Hearing Aid Compatibility FCC Order: http://hraunfoss.fcc.org/edocs-public/attachmatch/FCC-03-168A1.pdf

Safety Precautions for RF Exposure

Use only original manufacturer-approved accessories, or accessories that do not contain any metal

Use of non-original manufacturer-approved accessories may violate your local RF exposure guidelines and should be avoided.

Heed service markings

Except as explained elsewhere in the Operating or Service documentation, do not service any product yourself. Service needed on components inside these compartments should be done by an authorized service technician or provider.

Damage requiring service

Unplug the product from the electrical outlet and refer servicing to an authorized service technician or provider under the following conditions:

- Liquid has been spilled or an object has fallen into the product.
- The product has been exposed to rain or water.
- The product has been dropped or damaged.
- There are noticeable signs of overheating.
- The product does not operate normally when you follow the operating instructions.

SAR Information

- 1.490 W/kg @1g (Head)
- 1.380 W/kg @1g (Body)

THIS MODEL DEVICE MEETS THE GOVERNMENT'S REQUIREMENTS FOR EXPOSURE TO RADIO WAVES.

Your wireless mobile CDMA phone is a radio transmitter and receiver. It is designed and manufactured not to exceed the emission limits for exposure to radio frequency (RF) energy set by the Federal Communications Commission of the U.S. Government. These limits are part of comprehensive guidelines and establish permitted levels of RF energy for the general population. The guidelines are based on the safety standards previously set by both U.S. and international standards bodies:

- American National Standards Institute (ANSI) IEEE. C95.1-1992.
- National Council on Radiation Protection and Measurement (NCRP). Report 86. 1986.
- International Commission on Non-Ionizing Radiation Protection (ICNIRP) 1996.
- Ministry of Health (Canada), Safety Code 6. The standards include a substantial safety margin designed to assure the safety of all persons, regardless of age and health.

The exposure standard for wireless mobile CDMA phone employs a unit of measurement known as the Specific Absorption Rate, or SAR. The SAR limit set by the FCC is 1.6W/kg*.

The FCC has granted an Equipment Authorization for this model device with all reported SAR levels evaluated as in compliance with the FCC RF exposure guidelines. SAR information on this model device is on file with the FCC and can be found under the Display Grant section of http://www.fcc.gov/oet/fccid after searching on FCC ID: NM8LIBR100. Additional information on Specific Absorption Rates (SAR) can be found on the Cellular Telecommunications & Internet Association (CTIA) web-site as http://www.phonefacts.net.

* In the U.S. and Canada, the SAR limit for mobile CDMA phone used by the public is 1.6 Watts/kg (W/kg) averaged over one gram of tissue. The standard incorporates a substantial margin of safety to give additional protection for the public and to account for any variations in usage.

Normal condition only to ensure the radiative performance and safety of the interference. As with other mobile radio transmitting equipment, users are advised that for satisfactory operation of the equipment and for the safety of personnel, it is recommended that no part of the human body be allowed to come too close to the antenna during operation of the equipment.

Telecommunications & Internet Association (TIA) safety information

Pacemakers

The Health Industry Manufacturers Association recommends that a minimum separation of six inches be maintained between a handheld wireless phone and a pacemaker to avoid potential interference with the pacemaker. These recommendations are consistent with the independent research by and recommendations of Wireless Technology Research. Persons with pacemakers:

- Should ALWAYS keep the phone more than six inches from their pacemaker when the phone is turned ON.
- Should not carry the phone in a breast pocket.
- Should use the ear opposite the pacemaker to minimize the potential for interference. If you have any reason to suspect that interference is taking place, turn your phone OFF immediately.

Hearing Aids

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

Other Medical Devices

If you use any other personal medical device, consult the manufacturer of your device to determine if they are adequately shielded from external RF energy. Your physician may be able to assist you in obtaining this information.

Turn your phone OFF in health care facilities when any regulations posted in these areas instruct you to do so. Hospitals or health care facilities may be using equipment that could be sensitive to external RF energy.

Other tips and cautions

- Avoid using your phone near metal structures (for example, the steel frame of a building).
- Avoid using your phone near strong electromagnetic sources, such as microwave ovens, sound speakers, TV and radio.
- Avoid using your phone after a dramatic change in temperature.

WEEE Notice

The Directive on Waste Electrical and Electronic Equipment (WEEE), which entered into force as European law on 13th February 2003, resulted in a major change in the treatment of electrical equipment at end-of-life.

The purpose of this Directive is, as a first priority, the prevention of WEEE, and in addition, to promote the reuse, recycling and other forms of recovery of such wastes so as to reduce disposal.

The WEEE logo on the product or on its box indicates that this product must not be disposed of or dumped with your other household waste. You are liable to dispose of all your electronic or electrical waste equipment by relocating over to the specified collection point for recycling of such hazardous waste. Isolated collection and proper recovery of your electronic and electrical waste equipment at the time of disposal will allow us to help conserving natural resources. Moreover, proper recycling of the electronic and electrical waste equipment will ensure safety of human health and environment. For more information about electronic and electrical waste equipment disposal, recovery, and collection points, please contact your local city centre, household waste disposal service, shop from where you purchased the equipment, or manufacturer of the equipment.



RoHS Compliance

This product is in compliance with Directive 2002/95/EC of the European Parliament and of the Council of 27 January 2003, on the restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS) and its amendments.

A.2 PC Requirement to Run ActiveSync 4.x

To connect your device to the PC, you have to install Microsoft® ActiveSync® program on your PC. ActiveSync 4.x is included in the Getting Started Disc, which is compatible with the following operating systems and applications:

- Microsoft® Windows® 2000 Service Pack 4
- Microsoft® Windows Server® 2003 Service Pack 1
- Microsoft® Windows Server® 2003 IA64 Edition Service Pack 1
- Microsoft® Windows Server® 2003 x64 Edition Service Pack 1
- Microsoft® Windows® XP Professional Service Packs 1 and 2
- Microsoft® Windows® XP Home Service Packs 1 and 2
- Microsoft® Windows® XP Tablet PC Edition 2005
- Microsoft® Windows® XP Media Center Edition 2005
- Microsoft® Windows® XP Professional x64 Edition
- Microsoft® Outlook® 98, Microsoft® Outlook® 2000 and Microsoft® Outlook® XP, and Microsoft® Outlook® 2003 messaging and collaboration clients
- Microsoft® Office 97, excluding Outlook
- Microsoft® Office 2000
- · Microsoft® Office XP
- Microsoft® Office 2003
- Microsoft® Internet Explorer® 4.01 or later (required)
- Microsoft® Systems Management Server 2.0

A.3 Specifications

System information	
Processor/ Chipset/Speed	QUALCOMM™ MSM 7500, 384 MHz
Memory	ROM-Nand Flash: 128 MB (Standard) RAM: 64 MB DDR
	Figures are the total ROM and RAM memory available for use and storage. Since the memory is shared by the Operating System, applications, and data, the actual available memory is less than what is written.
Operating system	Microsoft® Windows Mobile® Version 5.0 for Smartphone
Display	
Туре	2.4" QVGA Transmissive LCD with white LED backlight
Resolution	240 x 320 dots resolution at 65K Colors
Orientation	Portrait and Landscape both
CDMA/EVDO Dual-band module	
Functionality	CDMA2000
Mode	Dual band: 800 and 1900 MHz
Antenna	Internal

Camera module	
Туре	2.0 Megapixels CMOS (Landscape view)
Resolution	 UXGA: 1600 x 1200 SXGA: 1280 x 960 VGA: 640 x 480 QVGA: 320 x 240 QQVGA: 160 x120

Connection	
I/O port	HTC ExtUSB™: an 11-pin mini-USB and audio jack in one
	(ExtUSB is a proprietary connection interface that is trademarked by HTC)
Bluetooth	V 1.2 with A2DP support, Class 2 transmit power

Microphone/ speaker	Built-in microphone and speaker, Hands-free
Headphone	AAC/AMR/WMA/WAV/MP3 codec
Physical	
Dimension	100 mm(L) x 50 mm(W) x 18.2 mm(T)

Controls and lights		
Buttons	CAMERA NAVIGATION CONTROL/ENTER POWER (on and off)/Quick List Left and Right SOFT KEYs	

• Left and Right 501 1 KL13
HOME/Lock
• BACK
 TALK (start call/answer call)
• END
Volume Adjustment Slider/Voice Speed Dial
OWERTY type 36 keys + 2 SOFT KEYs

120g with battery pack

Audio

Weight

Expansion slot

Keyboard	QWERTT type, 30 keys + 2 50FT KETS
LED	 One multi-color (red/amber/green) LED for battery, connection, and network status. One blue-color LED for Bluetooth connection status.

microSD slot	microSD memory card
Power supply	
Battery	Li-lon 1050 mAh removable, rechargeable battery
Talk time	Up to 5 hours
Standby	Up to 200 hours
AC Adapter	 Voltage range/frequency: 100 ~ 240V AC, 50/60Hz DC output: 5V and 1A

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1xEVDO 50 1xRTT 50

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