

## 8.4 Using Bluetooth

Bluetooth is a short-range wireless communications technology. Devices with Bluetooth capabilities can exchange information within a distance of about 10 meters without requiring a physical connection. You can even beam information to a device in a different room, as long as it is within the Bluetooth signal coverage range.

Bluetooth can be used in the following ways:

- Beam information, such as files, appointments, tasks, and contact cards, between devices that have Bluetooth capabilities.
- Synchronize information between your device and computer via Bluetooth.
- Use a Bluetooth-enabled headset (or other Bluetooth-enabled hands-free device such as a car kit) with your device for hands-free phone conversations.
- Use a Bluetooth service. Once you connect to another device or computer using Bluetooth, you can locate and use any of the services available on that device.
- Create a connection between your device and another Bluetooth-enabled phone to use that phone as a modem.

**Note** Normally, you will need another phone as a modem only if your Pocket PC device has no integrated phone capability.

### Bluetooth modes

Bluetooth on your device operates in three different modes:

- **On.** Bluetooth is turned on. Your device can detect other Bluetooth-enabled devices, but not vice versa.
- **Off.** Bluetooth is turned off. In this mode, you can neither send nor receive information using Bluetooth. You might want to turn Bluetooth off at times in order to conserve battery power, or in situations where using a wireless device is prohibited, such as on board an aircraft and in hospitals.
- **Visible.** Bluetooth is turned on, and all other Bluetooth-enabled devices can detect your device.

**Note** By default, Bluetooth is turned off. If you turn it on, then turn off your device, Bluetooth also turns off. When you turn on your device again, Bluetooth automatically turns on.

### To turn Bluetooth on and make your device visible

1. On your device, tap **Start > Settings > Connections** tab > **Bluetooth > Mode** tab.
2. Select the **Turn on Bluetooth** and **Make this device visible to other devices** check boxes.
3. Tap **OK**.

### Bluetooth partnerships

A Bluetooth partnership is a relationship that you create between your device and another Bluetooth-enabled device in order to exchange information in a secure manner. Creating a partnership between two devices involves entering the same Bluetooth passcode on both devices.

Creating a partnership between two devices is a one-time process. Once a partnership is created, the devices can recognize the partnership and exchange information without entering a passcode again. Make sure that on the two devices, Bluetooth is turned on and in visible mode.

### To create a Bluetooth partnership

1. On your device, tap **Start > Settings > Connections** tab > **Bluetooth**.
2. On the **Devices** tab, tap **Add new device**. Your device searches for other Bluetooth devices and displays them in the box.
3. Tap the desired device name in the box.
4. Tap **Next**.
5. Specify a passcode to establish a secure connection. The passcode can be 1 up to 16 characters.
6. Tap **Next**.
7. Wait for the paired device to accept the partnership. The receiving party needs to enter the same passcode that you specified.
8. The name of the paired device is then displayed. You may edit and enter a new name for that device.
9. Select the check boxes of services that you want to use from the paired device.
10. Tap **Finish**.

### To accept a Bluetooth partnership

1. Ensure that Bluetooth is turned on and in visible mode.
2. Tap **Yes** when prompted to establish a partnership with the other device.
3. Enter a passcode (the same passcode that is entered on the device requesting the partnership) to establish a secure connection. The passcode must be between 1 and 16 characters.
4. Tap **Next**.
5. Tap **Finish**. You can now exchange information with the paired device.

### To rename a Bluetooth partnership

1. Tap **Start > Settings > Connections** tab > **Bluetooth**.
2. Tap and hold the partnership on the **Devices** tab.
3. On the shortcut menu, tap **Edit**.
4. Enter a new name for the partnership.
5. Tap **Save**.

### To delete a Bluetooth partnership

1. Tap **Start > Settings > Connections** tab > **Bluetooth**.
2. Tap and hold the partnership on the **Devices** tab.
3. Tap **Delete**.

## Connect a Bluetooth hands-free or stereo headset

For hands-free phone conversations, you can use a Bluetooth hands-free headset such as a car kit with your device.

Your device also supports A2DP (Advanced Audio Distribution Profile) which is for stereo audio over Bluetooth. This means that you can use a Bluetooth stereo headset with your device for hands-free phone conversations as well as for listening to stereo music. Make sure that your stereo headset also supports A2DP.

Just like when connecting to any Bluetooth device, you also need to enter a passcode when connecting to a Bluetooth hands-free or stereo headset. The passcode is fixed and cannot be changed on a Bluetooth headset. Before you connect it to your device, check for the proper passcode in the manufacturer's documentation.

### To connect a Bluetooth hands-free or stereo headset

1. Make sure that both your device and the Bluetooth headset are turned on and within close range, and that the headset is visible. Refer to the manufacturer's documentation to find out how to set the headset in visible mode.
2. Tap **Start > Settings > Connections** tab.
3. Tap **Bluetooth > Devices** tab > **Add new device**. Your device searches for other Bluetooth-enabled devices and displays them in the list.
4. Tap the name of the Bluetooth headset, then tap **Next**.
5. Enter the passcode of the Bluetooth headset, then tap **Next**.
6. Make sure the **Hands Free** check box is selected.

If you have a Bluetooth stereo headset, also make sure the **Wireless Stereo** check box is selected.



7. Tap **Finish**.

While the Bluetooth headset is connected, the **Headset** icon (🎧) will appear on the title bar.

**Note** If the Bluetooth stereo headset becomes disconnected, turn the headset on and repeat steps 1 to 3 above. Tap and hold the name of the Bluetooth stereo headset and tap **Set as Wireless Stereo**.

## Beam information using Bluetooth

You can beam information, such as contacts, calendar items, and tasks, as well as files from your device to your computer or to another Bluetooth-enabled device.

**Note** If your computer does not have built-in Bluetooth capability, you need to connect and use a Bluetooth adapter or dongle on your computer.

### To beam information from your device to a computer

1. Turn on Bluetooth on your device, and make your device visible. For information about this, see “To turn Bluetooth on and make your device visible”.
2. You also need to set Bluetooth on your computer to visible mode. Do one of the following:
  - If your computer has Windows XP SP2 and your computer’s built-in or external Bluetooth adapter is supported by Windows XP SP2, open **Bluetooth Devices** from the Control Panel. Click the **Options** tab, then select the **Turn discovery on** and the **Allow Bluetooth devices to connect to this computer** options.
  - If the Bluetooth adapter on your computer was installed using a third-party provided driver, open the Bluetooth software that came with the Bluetooth adapter. This software varies by manufacturer, but in most cases, you will find a **Bluetooth Configuration** utility which you can open from the Control Panel. After Bluetooth Configuration opens, click the **Accessibility** tab, then select **Let other Bluetooth devices to discover this computer**. Refer to the Bluetooth adapter’s documentation for more information.
3. Create a Bluetooth partnership between the two devices. For information about creating a partnership, see “Bluetooth partnerships”.

After a partnership has been created successfully, your computer is ready to receive Bluetooth beams.
4. On your device, tap and hold an item to beam. The item can be an appointment in your calendar, a task, a contact card, or a file.
5. To beam a contact, tap **Menu > Send Contact > Beam**.

To beam other types of information, tap **Menu > Beam [type of item]**.

6. Tap the device name to which you want to send the beam.
7. If you beamed an Outlook item and it is not automatically added to Outlook, select **File > Import and Export** in Outlook to import it.

To beam information to a Bluetooth-enabled device such as another Pocket PC, follow steps 3 to 6 in the above procedure.

**Note** If the computer or device you want to beam to does not appear in your device's Bluetooth list, make sure that its Bluetooth is turned on and set to visible mode.

### To receive a Bluetooth beam

Your device will not detect and notify you of incoming Bluetooth beams unless you set it up to do this.

1. Tap **Start > Settings > Connections** tab > **Beam**.
2. Select the **Receive all incoming beams** check box.
3. Make sure your device is turned on, visible, and within close range of the device that is beaming the information.
4. When prompted to receive an incoming beam, tap **Yes** to receive the beamed information.

### Bluetooth Explorer and Bluetooth file sharing

**Bluetooth Explorer** searches for other Bluetooth devices that have file sharing enabled and lets you access their Bluetooth shared folder. You can copy files from and to their shared folder, and create subfolders in it. When you enable **Bluetooth file sharing** on your device, other Bluetooth-enabled devices will also be able to access your Bluetooth shared folder.

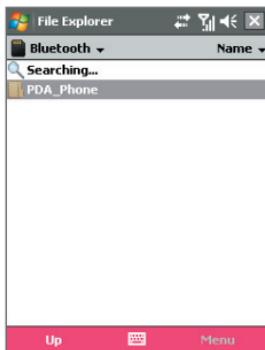
#### To enable Bluetooth Explorer and Bluetooth file sharing on your device

1. Tap **Start > Settings > Connections** tab > **Bluetooth > FTP** tab.
2. Select the **Enable Bluetooth Explorer** check box. This makes the **\Bluetooth** device folder visible in the File Explorer.
3. Select the **Enable File Sharing** check box.

You can use the default Bluetooth shared folder, or tap **Browse** to use another folder as your shared folder.

## To use Bluetooth Explorer

1. Bluetooth Explorer is integrated with the File Explorer program. You can open it by tapping **Start > Programs > Bluetooth Explorer** or by tapping Down arrow (▼) on the upper left of File Explorer then tapping **Bluetooth**.
2. Bluetooth Explorer then scans for other Bluetooth devices that have file sharing enabled. From the list, tap to select a Bluetooth device you want to connect to. You may need to enter a passcode in order for you to connect to the selected device.



3. If there are files contained in the Bluetooth shared folder on the other device, you will be able to see them on the Bluetooth Explorer screen. Select one or more files, then tap **Menu > Edit** and choose to cut or copy the files.
4. Tap **Up** twice.
5. Navigate to the folder where you want to paste the files on your device, then tap **Menu > Edit > Paste**.

## Use the device as a Bluetooth modem

You can connect your device to a notebook or desktop computer through Bluetooth and use the device as a modem for the computer.

**Note** If your computer does not have built-in Bluetooth capability, you need to connect and use a Bluetooth adapter or dongle on your computer.

For the computer to use the Internet connection of your device, activate Internet Sharing on your device, then set up a Bluetooth Personal Area Network (PAN) between the computer and your device.

1. On your device, turn on Bluetooth and set it to visible mode.
2. Initiate a Bluetooth partnership from your device by following the steps in “To create a Bluetooth partnership.”

Alternatively, you can initiate a Bluetooth partnership from the computer by following these steps (based on Windows XP SP2):

- a. In the Control Panel or System Tray, double-click the **Bluetooth Devices** icon.
  - b. In the Bluetooth Devices window, click **Add**.
  - c. The Add Bluetooth Device Wizard opens. Select the **My device is set up and ready to be found** check box, then click **Next**.
  - d. The wizard then detects your device and displays its name in the dialog box. Select the device name, then click **Next**.
  - e. Select **Let me choose my own passkey**, then enter a passcode (1 up to 16 digits) that will serve as an identification number for establishing a secure connection between your device and the computer. Click **Next**.
  - f. A confirmation message then appears on your device. Tap **Yes** to accept the connection, enter the same passcode, then tap **Next**.
  - g. On the computer, click **Finish** to exit the wizard.
  - h. On your device’s Partnership Settings screen, you can change the display name for the computer, then tap **Finish**.
3. Now, open the Internet Sharing program on your device. Tap **Start > Programs > Internet Sharing**.
  4. Select **Bluetooth PAN** as the **PC Connection**.
  5. From the **Network Connection** list, select the name of the connection that your device uses to connect to the Internet.
  6. Tap **Connect**.
  7. On your computer, set up a Bluetooth Personal Area Network (PAN) with your device:

- a. Tap **Start > Control Panel > Network Connections**.
  - b. Under **Personal Area Network**, click the **Bluetooth Network Connection** icon.
  - c. Under **Network Tasks**, click **View Bluetooth network devices**.
  - d. In the Bluetooth Personal Area Network Devices dialog box, select your device, then click **Connect**.
8. On the Internet Sharing screen on your device, check if a connected status is displayed, which indicates that your computer has been successfully connected to the Internet using your device as a Bluetooth modem.

## Use another Bluetooth phone as a modem

You can use another phone that has Bluetooth as a modem for your device to browse the Internet or to transfer other information.

To do this, create a Bluetooth modem connection on your device and then send information to the phone by using Bluetooth. The phone relays the information over the mobile phone network and then sends back to your device any information that you had requested over the connection.

Once you create a modem connection to the Bluetooth phone, you can reuse it whenever you want to use the phone as a modem. Make sure that Bluetooth is turned on and visible mode is enabled on both your device and the phone, and that the two are within close range.

**Note** Normally, you will need another phone as a modem only if your Pocket PC device has no integrated phone capability.

## To use a Bluetooth phone as a modem for your device

1. On your device, tap **Start > Settings > Connections** tab > **Connections**.
2. Tap **Add a new modem connection**.
3. Enter a name for the connection.
4. In the **Select a modem** list, tap **Bluetooth**.
5. Tap **Next**.
6. If the phone appears in the **My Connections** list, skip to step 11.

7. If the phone does not appear in the **My Connections** list, tap **Add new device**, and follow the remaining steps.
8. Select the phone from the list and tap **Next**.
9. Enter a passcode and tap **Next**.
10. Enter the same passcode on the phone and tap **Finish**.
11. In the **My Connections** list on your device, select the phone and tap **Next**.
12. Enter the phone number to dial for this connection and tap **Next**.
13. Enter the required logon information for this connection and tap **Finish**.

## 8.5 Using Wi-Fi

Wi-Fi provides wireless Internet access over distances of up to 100 meters. To use Wi-Fi on your device, you need access to a wireless access point of your service provider. When you are in public places such as in a coffee shop or restaurant, you will need access to their public wireless access points (also referred to as “hotspots”).

- Notes**
- You can connect to T-Mobile Hotspot if it is included in your data plan.
  - The availability and range of your device's Wi-Fi signal depends on the number, infrastructure, and other objects through which the signal passes.

### To connect to a wireless network

1. Open the **Comm Manager**.
2. Tap the **WLAN** button to turn on/off the wireless function. The WLAN icon indicates the wireless status.



: Wi-Fi is turned on.



: Wi-Fi is turned off.

3. After Wi-Fi has been turned on, your device then scans for available wireless networks in your area. The network names of the detected wireless networks will be displayed on a pop-up message window. Tap the desired wireless LAN, then tap **OK**.



4. On the next pop-up message window, tap **The Internet** if the wireless LAN connects your device to the Internet. Otherwise, tap **Work** if the wireless LAN connects your device to a private network.



5. If the wireless LAN is secured by a network key, enter this key, then tap **Connect**.

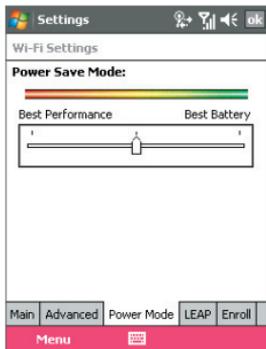


Next time you use your device to detect wireless networks, you will not see the pop-up message windows again, and you will not be prompted to enter the network key of the previously accessed wireless network (unless you perform a hard reset which will erase custom settings on your device).

- Note** Wi-Fi networks are self-discoverable, which means no additional steps are required for your device to connect to a Wi-Fi network. It may be necessary to provide a username and password for certain closed wireless networks, however.

### To save battery power while connected to a wireless network

1. Tap **Start > Settings > Connections** tab > **Wi-Fi Status** to open the Wi-Fi Settings screen.
2. On the **Power Mode** tab of the Wi-Fi Settings screen, move the **Power Save Mode** slider to a position that optimizes performance with the least power consumption.



For example, move the slider to the left (Best Performance) to have the optimal WLAN performance; move to the right (Best Battery) to obtain the maximum battery usage.

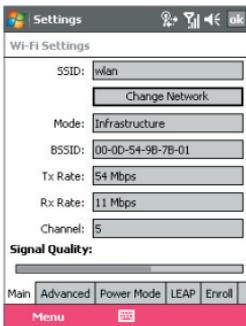
### To check the wireless LAN status

You can check the current wireless connection status from the following three screens of your device:

- **Title bar.** When you enable Wi-Fi on your device, the Wi-Fi ON icon (📶) will appear on the title bar of the Today screen.

After Wi-Fi is turned on, your device scans for available wireless networks and the wireless signal icon (📶) appears on the title bar. The arrows in this icon will move back and forth while your device is scanning for a wireless LAN signal. Once your device successfully connects to a wireless LAN, the arrows stop moving.

- **Wi-Fi Settings screen** (the Main tab). Here, it shows the name of the wireless network that your device is currently connected to. The configuration and signal quality of the wireless network are also shown.



- **Configure Wireless Networks screen.** Tap **Start > Settings > Connections** tab > **Wi-Fi > Wireless** tab. This screen displays the wireless networks currently available.

To connect to a wireless network in the list, tap and hold on the desired network, then tap **Connect**.

Tap a wireless network in the list to view or change its connection settings.

You can also add new wireless networks, if available, by tapping **Add New**.



## 8.6 Using Internet Sharing

**Internet Sharing** connects your PC or notebook computer to the Internet by using your device's data connection (GPRS or EDGE, for instance). You can choose to connect via USB or Bluetooth.

Follow the procedure in this section to set up your device as a USB modem. To learn how to set up your device as a Bluetooth modem, see "Use the device as a Bluetooth modem" in this chapter.

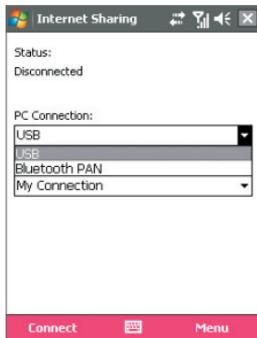
- Notes**
- Make sure your device has a SIM card installed, and you have set up a GPRS/EDGE or phone dial-up modem connection on your device. If your device has not been set up with a data connection yet, tap **Menu** > **Connection Settings** on the Internet Sharing screen. For more information about setting up a GPRS connection, see "To set up a GPRS connection to the Internet". For more information about setting up a phone dial-up connection, see "To set up a dial-up connection to your ISP".
  - If you want to use a USB cable connection, you must first install Microsoft ActiveSync version 4.2 or later on the computer.
  - Before using Internet Sharing, disable ActiveSync on your computer.

### To set up your device as a USB modem

1. On your device, tap **Start** > **Programs** > **Internet Sharing**.
2. In the **PC Connection** list, select **USB**.
3. In the **Network Connection** list, select the name of the connection that your device uses to connect to the Internet.
4. Plug in the USB cable between your device and the computer.
5. Tap **Connect**.

### To end the Internet connection

- On the Internet Sharing screen, tap **Disconnect**.



# Chapter 9

## Using Windows Live

**9.1 Windows Live Mobile**

**9.2 Windows Live Search**

**9.3 Windows Live Messenger Mobile**

**9.4 Sending Photos to Your Windows Live Space**



## 9.1 Windows Live Mobile

**Windows Live Mobile** gives you full Internet experience on your device. It helps you to find information, pursue your interests, and get in touch with friends and family on the Internet easier.

Windows Live Mobile offers the following key features:

- **Windows Live Search**, which is Windows Live's search engine for finding information on the web.
- **Windows Live Contacts**, your address book for storing Windows Live Mail, Windows Live Messaging, and Hotmail contacts.
- **Windows Live Messenger Mobile**, the next generation of MSN Messenger Mobile.
- **Windows Live Mail**, the next generation of Hotmail.

### Set up Windows Live Mobile

The first time you use Windows Live Mobile, sign in by using your Windows Live ID, which is your Windows Live Mail or Hotmail address, and password.

#### To set up Windows Live Mobile for the first time

1. Tap **Start > Programs > Windows Live**.
2. Tap **Sign in to Windows Live**.
3. On the next screen, tap the links to read the Windows Live Term of Use and the Microsoft Privacy Statement. After reviewing them, tap **Accept**.
4. Enter your Windows Live Mail or Hotmail address and password, select the **Save password** checkbox, then tap **Next**.
5. Choose whether or not to show Windows Live's search bar and applications on the Today screen then tap **Next**.



- Choose what information you want to synchronize online with your device.

If you choose to synchronize **Contacts and Messenger**, your online contacts will be added to the contact list and to Windows Live Messenger Mobile on your device.

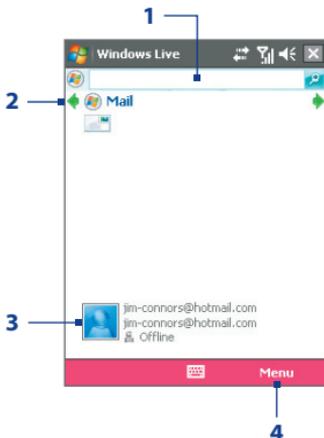
If you choose to synchronize **E-mail**, your Windows Live Mail or Hotmail inbox messages will be downloaded to your device.

- Tap **Next**.
- After synchronization is complete, tap **Done**.



## The Windows Live Mobile interface

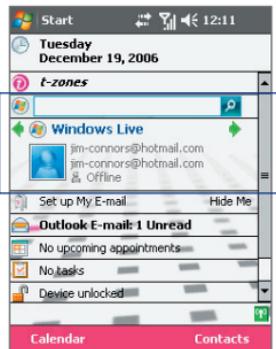
On the main interface of Windows Live Mobile, you will see a search bar, navigation bar, and an area where you can customize to show your picture.



- This is Windows Live Search. See "Windows Live Search" in this chapter for details.
- Tap the Left or Right arrow to switch among Live Mail, Messenger, and Sync status.
- Tap to access Windows Live Messenger. See "Windows Live Messenger" in this chapter for details.
- Tap **Menu** to access and change settings.

If you chose to display the search bar and Windows Live applications on the Today screen when you were setting up Windows Live, you'll see them on the Today screen:

Search bar and  
Windows Live applications



To show or hide them, open Windows Live and tap **Menu > Options > Today screen content**.

## 9.2 Windows Live Search

**Windows Live Search** allows you to easily find information on the Internet. It is integrated in the Windows Live Mobile interface, and appears as a search bar.

### To find information on the Internet

1. Enter your keywords in the search bar.
2. Tap  or **Search**.

Internet Explorer Mobile then launches and displays links to related web sites. The links are organized in categories.

- **Local.** Allows you to perform a local search when you're trying to locate a certain place or street address. See "To search for a location" for details.



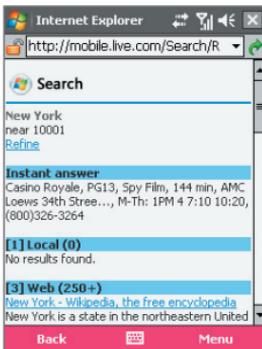
Search results

- **Web.** Shows the results from the web search, which are links to all related web sites.
  - **Map.** Shows links to web sites containing maps.
  - **News.** Shows related links to news articles.
  - **Spaces.** Shows related links to interests, photos, and all kinds of information that are shared in Windows Live Spaces.
3. Scroll through the categories and tap a link to go to the web site where the information that you want is located.

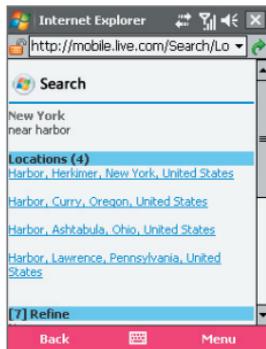
### To search for a location

After entering your keywords in the search bar, do the following:

1. On the Internet Explorer Mobile screen, tap **Choose a location** under the **Local** category.
2. In the **Near** box, enter the zip or postal code, city, or state where the place you're looking for is located. You may also enter a specific street name or a general location name as your search keyword.
3. Tap **Search**.
4. If an exact match is found, it will be displayed under **Instant answer**. Otherwise, possible locations will be listed under **Local**. Tap a link to view more information about a location.



Example 1: An exact match



Example 2: Location candidates

## 9.3 Windows Live Messenger Mobile

**Windows Live Messenger Mobile** allows you to send and receive instant messages online. With this mobile version of Windows Live Messenger, you enjoy many of the same cool features that you get from the desktop version, which include the following:

- Instant messaging via text and voice
- Multiple conversations
- Add emoticons
- Contact list with presence
- Send and receive files including photos
- Change status/display name
- View contacts by online status, groups, and more
- Send messages even when a contact is offline

**Note** Before you can use Windows Live Messenger Mobile, your device must be connected to the Internet. For information about setting up an Internet connection, see “Connecting to the Internet” in Chapter 6.

### Launch the messenger and sign in

#### To open Windows Live Messenger Mobile

Do one of the following:

- Tap **Start > Programs > Windows Live Messenger Mobile**.
- On Windows Live or the Today screen, tap the Left or Right arrow until you see **Messenger**, then tap it.

#### To sign in and out

1. To sign in, tap **Sign in** on the messenger screen.
2. If this is your first time to sign in, a message appears to inform you that your messenger contacts will be added to the contact list on your device. Tap **OK** to add them.

Signing in may take several minutes, depending on your connection speed.

3. To sign out, tap **Menu > Sign Out**. Your status changes to **Offline**.

## Add Windows Live contacts

You can add new Windows Live contacts in the messenger or in Contacts.

### To add a Windows Live contact in the messenger

1. Tap **Menu > Add new contact**.
2. Enter the e-mail address of the contact then tap **OK**.

### To add a Windows Live contact in Contacts

1. Tap **Start > Contacts**.
2. Tap **New** then tap **Windows Live**.
3. In the **IM** box, enter the e-mail address of the contact, which can be a Windows Live ID or any other e-mail address.

**Tip** You can fill in other information about the contact, if desired. This is not absolutely necessary if you will communicate with the contact only through Windows Live Messenger or Live Mail.

4. Tap **OK**.
5. Follow the remaining instructions to add the new contact to your Windows Live contact list.

### To delete a contact

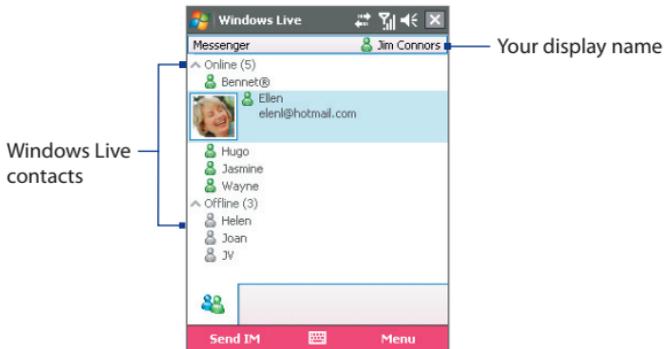
1. In the messenger, select the contact and tap **Menu > Contact options > Remove contact**.
2. Choose whether to block the contact.
3. Choose whether to also delete the contact from your device's contact list.
4. Tap **OK**.

## Send instant messages

You can send instant messages with emoticons, and even talk by sending a voice clip. While chatting, you can send and receive files directly on a message window. You can also start conversations with several contacts and switch between their message screens, or you can invite participants to join in a conversation.

### To start and end conversations

1. In the contact list, select a contact then tap **Send IM** to open a message screen.



2. Send an instant message. See “To send an instant message with emoticon” for details.
3. To start a conversation with another contact, tap  to go back to the contact list, then select another contact and tap **Send IM** again. Another message screen opens.
4. To switch from one message screen to another, tap the display picture of the contact whom you want to talk to.



5. To end a conversation with the current contact, tap **Menu > End conversation**.
6. To end all active conversations, tap **Menu > End all conversations**.

### To send an instant message with emoticon

1. Select a contact and start a conversation.
2. Enter your text message in the text entry area of the message screen.
3. To add an emoticon, tap **Menu > Add emoticon** then tap an icon from the list of emoticons.
4. Tap **Send**.

- Tips**
- To send a file, tap **Menu > Send**. You can choose to send a picture, voice clip or any file.
  - To invite one or more contacts to the conversation, tap **Menu > Options > Add participant**.

### To talk using your voice

1. Select a contact and start a conversation.
2. xxx
3. xxx
4. xxx

## Personalize the messenger

While on the contacts list, you can do the following:

- Tap **Menu > Change status** to set your current status (such as Busy, Out to lunch, etc.) so that your contacts will know whether or not you're available.
- Tap **Menu > Change appearance** to change your display name, add a personal message, and add your picture.
- Tap **Menu > Sort by** to organize contacts by online status, groups, name, or e-mail address. You can also hide offline contacts from the contact list.
- Tap **Options** to see more settings.

## 9.4 Sending Photos to Your Windows Live Space

If you created your own live space, you can send upload pictures to Spaces.

### To upload pictures to your Windows Live Space

1. Tap **Start > Programs > Pictures & Videos**.
2. Select a picture then tap **Send to your space**.



# Chapter 10

## Using Outlook with Exchange Server

**10.1 Synchronizing Your Device with  
the Exchange Server**

**10.2 Scheduling Synchronization**

**10.3 E-mail Security**



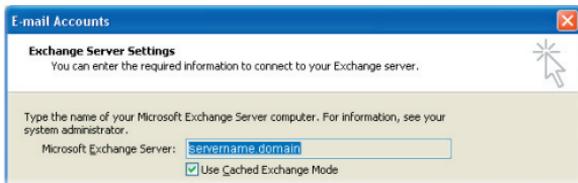
## 10.1 Synchronizing Your Device with the Exchange Server

If you want to keep up-to-date with your company e-mails and meeting schedules while you're out of the office, you can connect your device to the Internet wirelessly and synchronize this information with your company's Exchange Server. You can also access your company addressbook anytime. Your company must have a mail server that is running Microsoft Exchange Server with Exchange ActiveSync.

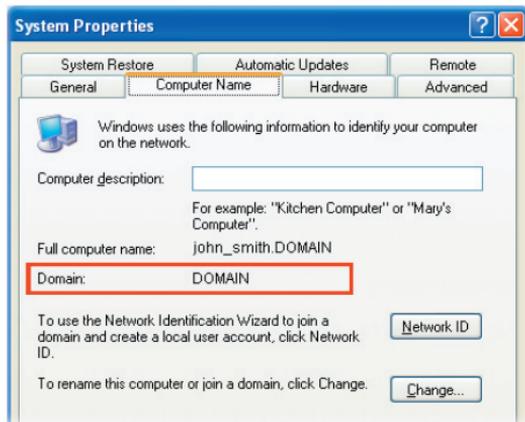
### Get the Exchange Server settings

Before you can start to synchronize or access information from the Exchange Server, you need to know the Exchange Server name and domain name of your company's mail server. You can get this information from your network administrator, or do the following steps to find them in your office computer:

1. In Outlook, click **Tools > E-mail Accounts**.
2. Select **View or change existing e-mail accounts**.
3. Double-click **Microsoft Exchange Server**.
4. On the Exchange Server Settings screen, you will see the Exchange Server name.



5. To check the domain name, click **Start > Settings > Control Panel**, then double-click **System**.
6. In the System Properties dialog box, click the **Computer Name** tab. You will then see the domain name.



## Set up an Exchange Server connection

To set up an Exchange Server connection on your device, enter the Exchange Server name, domain name, and the user name and password that you use at work onto your device.

If you have not synchronized your device with your PC, follow these steps to set up an Exchange Server connection.

1. Tap **Start > Messaging > Outlook E-mail**
2. Tap **New E-mail Account** on the Account Picker screen.
3. Select **Other** in the **Your e-mail source** list, then tap **Next**.
4. Select **Outlook E-mail** in the **Your e-mail provider** list, then tap **Next**.
5. In **Server address**, enter the Exchange Server name, and tap **Next**.
6. Enter your user name, password, and domain, and tap **Next**.
 

**Tip** To change the rules for resolving synchronization conflicts, tap **Advanced**.
7. Select the check boxes for the types of information items that you want to synchronize with the Exchange Server.

**8.** To change synchronization settings of an information type, for example, E-mail, select the type of information, and tap **Settings**.

**9.** Tap **Finish**.

**Note** If you synchronized e-mails with your PC before, open ActiveSync on your device and tap **Menu > Add Server Source** to set up an Exchange Server connection. When you're prompted to select information types for synchronization, you need to clear the **E-mail** check box under the Windows PC item first before you can select the **E-mail** check box under Exchange Server.

**Tips** To change Exchange Server settings, you can do one of the following:

- On the Account Picker screen, tap **Menu > Options > Outlook E-mail**.
- While in a message list, tap **Menu > Tools > Options > Outlook E-mail**.
- In ActiveSync, tap **Menu > Configure Server**.

To change the information types to be synchronized with the Exchange Server, follow the same steps in changing information types to synchronize with the PC in Chapter 5.

## Start synchronization

Before you start synchronizing with the Exchange Server, make sure your device has been set up with a data connection to the Internet so that you can synchronize wirelessly. See Chapter 8 for details.

After you finish setting up an Exchange Server connection, your device automatically starts synchronization.

You can manually start synchronization anytime by tapping **Sync** in ActiveSync.

**Note** If you connect your device to your office computer via a USB or Bluetooth connection, you can use this connection to the PC to “pass through” to the network and download Outlook e-mails and other information to your device.

## 10.2 Working With Company E-mails

Your device gives you instant access to your company e-mails and lets you manage your messages easier. You can use some or all of the following mobile messaging features, depending on the version of the Exchange Server that your company is using. Please check this with your network administrator.

- Get instant e-mails on your device using **Direct Push**, or set a schedule for synchronizing Outlook.
- Use the **Fetch Mail** feature to download only one e-mail message at a time without having to wait for a full synchronization.
- Remotely search for an e-mail message that is stored on the Exchange Server.
- Filter messages that are downloaded to your device.
- Flag Outlook e-mail messages that you created on your device.
- Automatically reply messages with an “out-of-office” status.
- Open links to SharePoint documents.
- Receive, reply to, forward, and compose IRM-protected e-mail.
- Encrypt and digitally sign messages. (See “E-mail Security” for details).

### Automatic synchronization through Direct Push

**Direct Push** technology (push e-mail feature) enables you to receive new e-mails on your device as soon as they arrive in your Inbox on the Exchange Server. With this feature, items such as contacts, calendar and tasks are also immediately updated onto your device when these items have been changed or new entries have been added on the Exchange Server. To make Direct Push work, you need to have a GPRS connection on your device.

You need to perform a full synchronization between your device and the Exchange Server first before Direct Push can be enabled.

**Requirement** The Direct Push feature works for your device only if your company is using **Microsoft Exchange Server 2003 Service Pack 2 (SP2) with Exchange ActiveSync or higher version.**

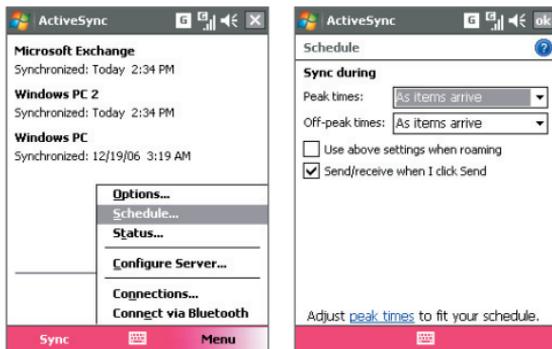
### To enable Direct Push via Comm Manager

1. On the Today screen, tap the **Comm Manager** icon (📶).
2. On the Comm Manager screen, tap the **Microsoft Direct Push** button. The button  will turn to , which indicates that you will receive e-mails as they arrive.

When the button is in the  state, you need to manually retrieve your e-mails.

### To enable Direct Push via ActiveSync

1. In ActiveSync on your device, tap **Menu > Schedule**.
2. Select **As items arrive** in the **Peak times** and **Off-peak times** boxes.



**Note** When both the GPRS and Wi-Fi connections are turned on at the same time, the Direct Push feature will always opt for GPRS, for which you could be charged per your network operator's service plan.

### Scheduled synchronization

If you do not want to use Direct Push, you can set a regular schedule for synchronizing Outlook e-mail and information. Set how often to synchronize during **Peak times** (which usually refer to your working hours) when e-mail volume is high, as well as **Off-peak times** when e-mail volume is low.

1. In ActiveSync on your device, tap **Menu > Schedule**.
2. Select a shorter time interval in the **Peak times** box for you to be able to receive e-mails more frequently.

3. Select a longer interval in the **Off-peak times** box.

**Tip** To set the days and hours that make up your peak and off-peak times, tap **Adjust peak times to fit your schedule**.

## Instant download through Fetch Mail

The **Fetch Mail** feature downloads an entire e-mail immediately without the need for you to perform a full Send/Receive action. This limits the download to just the e-mail message that you want and helps save data cost.

**Requirement** Fetch Mail works for your device only if your company is using **Microsoft Exchange Server 2007 or higher**.

1. Tap **Start > Messaging > Outlook E-mail**.
2. Tap an e-mail message to open it.
3. By default, only the first 2KB of the message is shown. To download the whole e-mail, scroll to the bottom of the message then tap **Get the rest of this message**.
4. A “Downloading message” status appears. Wait for the remainder of the message body to be downloaded.

**Tip** For information about changing e-mail sync options such as the initial download size limit for e-mail, see “Customize e-mail settings” in Chapter 7.

## Search for e-mails on the Exchange Server

You can access messages that are not available on your device by searching your Microsoft Exchange Server mailbox. The search results will be downloaded and displayed in a Search Results folder.

**Requirement** Your company must be using **Microsoft Exchange Server 2007 or higher**.

1. Tap **Start > Messaging > Outlook E-mail**.
2. Tap **Menu > Tools > Search Server**.
3. In the **Look for** text box, enter the search keyword.
4. Choose the date range of messages to search from.
5. From the **Look in** list, choose whether to search from your inbox or outbox only or to search all folders.
6. Tap **Search**.

## Filter the message list

< how ? >

## Flag your messages

Flags serve as a reminder to yourself to follow-up on important issues or requests that are indicated in the messages. Flagging messages, which has been a useful feature on desktop Outlook E-mail, can also be done in Outlook Mobile on your device. You can flag received messages on your device.

**Requirement** Flags are enabled only if e-mails are synchronized with **Microsoft Exchange Server 2007 or higher**. Flags are disabled or hidden if e-mails are synchronized with earlier versions of Microsoft Exchange Server.

## To flag or unflag a message

1. Tap **Start > Messaging > Outlook E-mail**.
2. Select a message, or open a message.
3. Tap **Menu > Follow Up** and select one of the following options:



- **Set Flag** Mark the message with a red flag to indicate that it needs follow up.
- **Complete Flag** Mark the message with a check mark to indicate that the issue or request in the e-mail is already completed.
- **Clear Flag** Remove the flag to unmark the message.

**Note** E-mail message reminders are displayed on your device if the messages are flagged with reminders and synchronized from the Exchange Server

## Out-of-office auto-reply

Outlook Mobile allows you to retrieve and change your out-of-office status. Just like desktop Outlook E-mail, Outlook Mobile automatically sends an auto-reply message when you're not available.

### To send out-of-office auto-reply messages

1. Tap **Start > Messaging > Outlook E-mail**.
2. Tap **Menu > Tools > Out of Office**.
3. From the **I am currently** list, select **Out of the Office**.
4. Enter your auto-reply message then tap **Done**.



## View SharePoint documents

When you receive an HTML e-mail containing a link to a SharePoint document such as a PDF, Word, Excel, or PowerPoint file, you can tap the link to access and view the document on your device.

**Requirement** Your company must be using **Microsoft Exchange Server 2007 or higher**.

## 10.3 Meeting Request

## 10.5 E-mail Security

Windows Mobile on your device protects your Outlook e-mails through Secure/Multipurpose Internet Mail Extension (S/MIME), which allows you to digitally sign and encrypt your messages.

Digitally signing a message applies your certificate with the authorization key to the message. This proves to the recipient that the message is from you and not from an imposter or a hacker, and that the message has not been altered.

Encryption protects the privacy of your message by converting it from plain, readable text into cipher (scrambled) text. Only the recipient who has the authorization key can decipher the message.

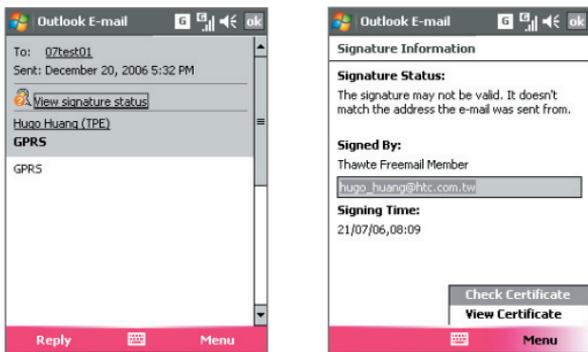
- Notes**
- S/MIME encryption and digital signatures for Windows Mobile-based devices are available only with Exchange Server 2003 Service Pack 2 or a later version that supports S/MIME. If you are not using one of these products, or have not yet synchronized, these options are unavailable.
  - You can encrypt a message with or without a certificate. However, to read an encrypted message, you need a valid certificate to decrypt it.

### To individually sign and encrypt a new message

1. Tap **Start > Messaging > Outlook E-mail**.
2. Tap **Menu > New** to create a new message.
3. Tap **Menu > Message Options**.
4. Select the **Encrypt message** and **Sign message** check boxes, and tap **OK**.

### Verify the digital signature on a signed message you receive

1. Open the Outlook e-mail message that has been digitally signed.
2. At the top of the message, tap **View Signature Status**.
3. Tap **Menu > Check Certificate**.



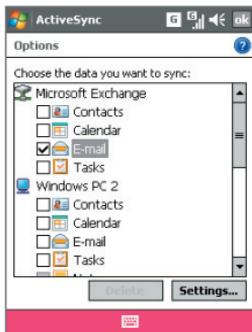
To view the details of the certificate in the message, tap **Menu > View Certificate**.

**Note** There can be several reasons why a digital signature is not valid. For example, the sender's certificate may have expired, it may have been revoked by the certificate authority, or the server that verifies the certificate is unavailable. Contact the sender to report the problem.

### To digitally sign and encrypt all messages

You can set up ActiveSync to digitally sign and encrypt all outgoing messages. You must obtain a valid certificate to sign and encrypt e-mail messages successfully.

1. Tap **Start > Programs > ActiveSync**.
2. Tap **Menu > Options**.
3. Select the **E-mail** information type, and tap **Settings**. On the E-mail Sync Options screen, tap **Advanced**.



4. Do one or both of the following:
  - To sign all your outgoing e-mail messages so that recipients can be certain that the messages were sent by you and have not been altered in any way, select the **Sign all outgoing e-mail messages** check box.
  - To encrypt all your outgoing e-mail messages so that the contents of your messages are protected from being viewed by anyone other than the intended recipients, select the **Encrypt all outgoing e-mail messages** check box.
5. Tap **Choose Certificate** to select a certificate for signing or encrypting outgoing e-mail messages.

## Working with IRM-protected e-mail

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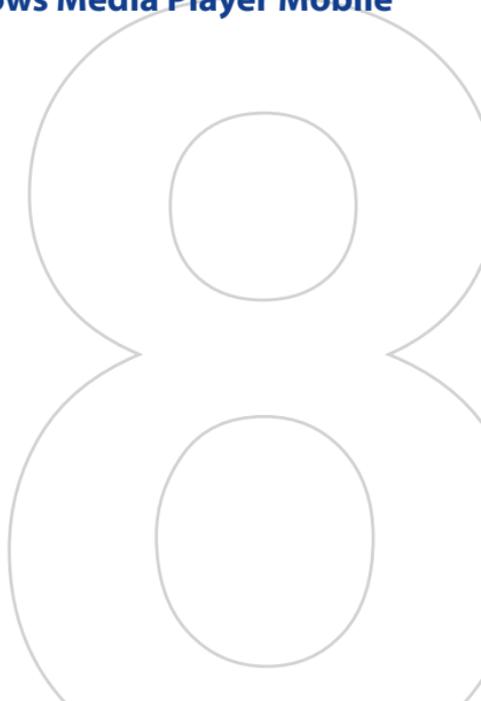
# Chapter 11

## Experiencing Multimedia

**11.1 Using Camera**

**11.2 Using Pictures & Videos**

**11.3 Using Windows Media Player Mobile**



## 11.1 Using Camera

Taking photos and recording video clips along with audio are easy with your device's built-in camera.

### To open the Camera screen

- Press the CAMERA button on your device; or
- Tap **Start > Programs > Camera**; or
- Tap **Start > Programs > Pictures & Videos > Camera** icon.

CAMERA button



### To exit the Camera

- Tap the **Exit** icon (  ) on the Camera screen.

## Capture modes

The camera on your device allows you to capture pictures and video clips by using various built-in modes with flexibility. The Camera is set to the Photo capture mode by default. The upper left corner of the screen displays the active capture mode. To switch to other capture modes, do any of the following:

- Tap  or  on the Camera screen.
- Press NAVIGATION left or right.

Select the capture mode.

Current capture mode.



The available capture modes of the camera are as follows:

- **Photo:** Captures standard still images.
- **Video:** Captures video clips, with or without accompanying audio.
- **MMS Video:** Captures video clips suitable for sending via MMS.
- **Contacts Picture:** Captures a still image and gives you the option to immediately assign it as a Photo ID for a contact.
- **Picture Theme:** Captures still images and places them within frames.
- **Sports:** Captures a sequence of still images (3, 5, 7, or 10) automatically.
- **Burst:** Captures a sequence of still images (maximum 30) as long as the CAMERA button on the device or the ENTER button on the NAVIGATION Control is kept pressed.

### File formats supported

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

Capture type	Format
Still image	JPEG
Video	MPEG-4 (.mp4), Motion-JPEG (.avi), H.263 (.3gp)
MMS Video	H.263 baseline (.3gp), MPEG-4 (.mp4)
Sports / Burst	JPEG

### Camera controls

Use the following device buttons and on-screen controls to take photos or video clips and to modify settings.

#### The CAMERA and ENTER buttons

Press the CAMERA button on the device to open the Camera screen. If already on the Camera screen, you can use either the CAMERA button or the ENTER button as the shutter release.

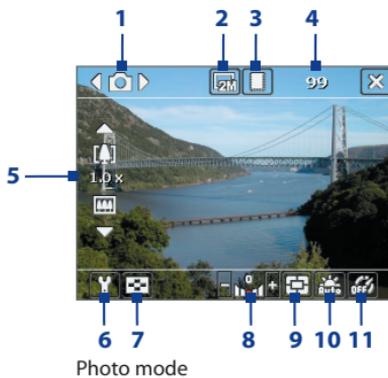
- Press the CAMERA button or the ENTER button to take a photo or contacts picture.

- Press the CAMERA button or the ENTER button to start recording video; press it again to stop recording.
- Press the CAMERA button or the ENTER button each time when taking photos for a picture theme.
- To take consecutive shots in Sports mode, press the CAMERA button or the ENTER button shortly, then move your device to follow the movement of your subject.
- Press and hold the CAMERA button or the ENTER button when taking consecutive shots in Burst mode.

### The NAVIGATION Control

- Press NAVIGATION up or down to increase or decrease the zoom level.
- Press NAVIGATION left or right to go to the previous or next sequential capture mode.

### On-screen controls and indicators



- 1 Mode Switching control.** Tapping the left/right arrow (◀/▶) on the screen allows you to switch the capture mode.
- 2 Resolution.** The resolution icon (LS/LM/L/LM/2M) indicates the current resolution. Tap to toggle among the different resolutions.
- 3 Storage.** Tap to toggle between saving captured photos or video clips on the device memory (SD) or on the memory card (SD).

- 4 **Remaining information indicator.** In Photo, Contacts Picture, Picture Theme, Sports, and Burst modes, this shows the remaining, available shots of pictures based on 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.
- 5 **Zoom control.** Tapping the up/down arrow (▲/▼) or tapping [1] / [2] on the screen allows you to zoom in or zoom out.
- 6 **Camera Settings.** Tap the **Tool** icon (⚙️) to open the Camera Settings screen.
- 7 **Viewer.** Tap the **Viewer** icon (🖼️) to open the Pictures & Videos screen.
- 8 **Brightness.** Tapping the minus/plus icon (⊖/⊕) decreases or increases the brightness level.
- 9 **Metering Mode.** Tap to toggle the metering mode between **Center Area** (☒) and **Average** (☒).
- 10 **White Balance.** Tap to toggle among the different white balance settings: Auto (☀️), Daylight (☀️), Night (🌙), Incandescent (💡), and Fluorescent (💡).
- 11 **Self-timer.** Tap to set the Self-timer to 2 seconds, 10 seconds, or off when in the Photo or Contacts Picture mode. When you press the ENTER button or the CAMERA button to capture a still image, it starts to count down, and then captures a still image after the assigned time (2 seconds or 10 seconds).
- 12 **Recording indicator.** This shows a red, blinking indicator while video recording is in progress.
- 13 **Exit.** Tap the **Exit** icon (✖️) to exit the Camera program.
- 14 **Progress indicator.** In Picture Theme, Sports, and Burst modes, this shows the total number of consecutive shots.
- 15 **Template Selector icon.** In Picture Theme mode, tap [1] to toggle among the different templates.



Picture Theme mode

## Still image capture modes

While using Still Image capture modes, such as **Photo**, **Contacts Picture**, **Picture Theme**, **Sports**, and **Burst**, you can capture still image(s) by pressing the CAMERA button on the device or the ENTER button on the NAVIGATION. Still images will be saved in JPEG format.

While capturing an image in the Picture Theme capture mode, you can select a preset template. To view and select from different templates, tap  on the Camera screen. Depending on the chosen template, one or more photos may need to be taken for the template.

## Video capture mode

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

Before you capture a video clip, you can specify the desired length of recording in terms of time or file size on the Camera Settings screen.

Video clips can be saved in MPEG-4 (.mp4), H.263 (.3gp), or Motion-JPEG (.avi) format.

## MMS Video capture mode

The **MMS Video** capture mode makes it convenient for you to capture a video file and then send it via MMS. Press the ENTER button or the CAMERA button to start recording a video clip (with audio if desired). To stop recording, press the ENTER button or the CAMERA button again.

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

You can specify the capture format to be either H.263 or MPEG-4 on the Camera Settings screen; however, the ideal format for MMS is H.263 (3GPP). After you capture the video file, tap  on the Review screen to send the file through MMS.

## The Review screen

After taking a still image or recording a video clip, you can view the image or video clip on the **Review screen**. In addition, you can tap the icons at the bottom of the Review screen to delete a captured image or video, send it via e-mail or MMS, and more.

### Review screen icons



Photo, Video, MMS Video  
and Picture Theme modes



Contacts Picture mode



Sports and Burst modes

- 1 Back.** Tap  to go back to the Camera screen.
- 2 Delete.** Tap  to remove the captured image or video.
- 3 Send.** Tap  to send via e-mail or MMS.
- 4 View.** Tap  to view the image in the Pictures & Videos program, or play the captured video in Windows Media Player Mobile.

- 5 Assign to Contacts.** Tap  to associate the photo to a selected contact.
- 6 Browse.** After you have taken photos in Sports or Burst mode, the total number of consecutive shots is shown in the lower right corner of the Review screen. Tap the up/down arrow () or press NAVIGATION up/down to browse through the sequence of photos.

### To change the display duration of the Review screen

1. Tap  to open the Camera Settings screen.
2. On the Camera Settings screen, tap . The Advanced menu then appears.
3. Tap **Review Duration**, then tap the desired time length for displaying captures on the Review screen.

## Zooming

While capturing a still image or a video clip by using the camera, you can 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, use NAVIGATION on your device, or tap the triangular Up arrow above the Zoom Ratio indicator, to zoom in your subject. When the zooming limit is reached, you will hear a beep. To zoom out, press NAVIGATION down, or tap the Down arrow. The camera zoom range for a picture or a video clip depends on the capture mode and capture size.

### Zoom range

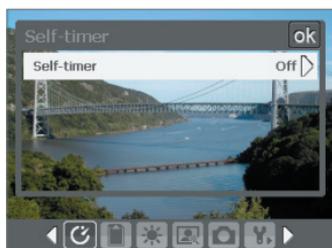
The camera zoom range for a picture or a video clip depends on the capture mode and capture size. The following table is a summary.

Capture mode	Capture size setting	Zoom range
<b>Photo</b>	2M (1600 x 1200)	No zooming available
	1M (1280 x 960)	1.0x to 2.0x
	Large (640 x 480)	1.0x to 2.0x
	Medium (320 x 240)	1.0x to 4.0x
	Small (160 x 120)	1.0x to 10.0x

Capture mode	Capture size setting	Zoom range
<b>Video</b>	Medium (176 x 144)	1x and 2x
	Small (128 x 96)	1x and 2x
<b>MMS Video</b>	Medium (176 x 144)	1x and 2x
	Small (128 x 96)	1x and 2x
<b>Contacts Picture</b>	Large (480 x 640)	1.0x to 2.0x
	Medium (240 x 320)	1.0x to 4.0x
	Small (120 x 160)	1.0x to 4.0x
<b>Picture Theme</b>	Determined by the current template	Depends on the size of the template currently loaded
	Large (640 x 480)	1x and 2x
<b>Sports</b>	Medium (320 x 240)	1x, 2x and 4x
	Small (160 x 120)	1x, 2x, 4x and 8x
	Large (640 x 480)	1x and 2x
<b>Burst</b>	Medium (320 x 240)	1x, 2x and 4x
	Small (160 x 120)	1x, 2x, 4x and 8x

**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:

## The Camera Settings screen



Camera Settings screen in Photo mode

While capturing a still image or video clip using any capture modes, tap the **Tool** icon (  ) to access the Camera Settings screen. The Camera Settings screen allows you to configure capture settings.

When you tap the icons at the bottom of the Camera Settings screen, different menus will appear. Some menus and options may be available only in certain capture modes.

**Tip** You can also press the [Navigation Control](#) buttons to navigate menus.

For more information about the different menus and settings, see the succeeding sections.



### Self-timer menu

- **Self-timer.** 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 the CAMERA button or the ENTER button.



### Template menu

- **Template.** Select a template (in Picture Theme mode only).



### Sports/Burst Settings menu

- **Capture Speed.** This determines the interval between shots. **Fast** captures consecutive shots at the shortest interval.
- **Snapshots.** Select the number of consecutive shots to capture (in Sports mode only).



### Storage menu

- **Storage.** Select where you want to save your files. You can either save the files to the main memory or to a storage card.



### Ambience menu

- **White Balance.** Select a white balance setting type such as Fluorescent, Night, etc. to suit your lighting environment.
- **Effect.** Choose a special effect such as Grayscale, Sepia, etc., to apply to your photos or video clips.



### Capture Settings menu

- **Resolution.** Select the desired image or video size.
- **Quality.** Select the JPEG image quality level for all captured still images. You can choose from **Basic**, **Normal**, **Fine**, and **Super Fine**.
- **Metering Mode.** Select a metering mode to allow the camera to measure the amount of light in the center and around the image and calculate the best-fit exposure value before capturing. Choose either **Center Area** to measure light using the center area of the image or **Average** to measure light using the area all around the image.
- **Time Stamp** (Photo, Sports and Burst modes). Choose whether or not to include the shooting date and time on captured photos.



### Capture Mode menu

- **Mode.** Switch between different capture modes such as Photo, Video, Contacts Picture, and more. For more information about these modes, see “Capture modes” earlier in this chapter.



### Advanced menu

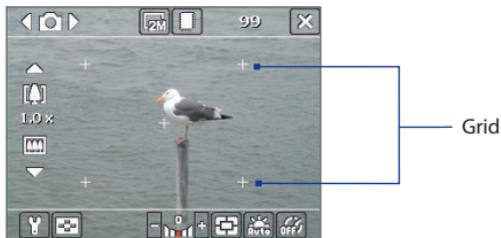


Tap the left/right icon in this bar to switch between the menu pages in the Advanced menu.

Alternatively, when using the NAVIGATION Control buttons, press NAVIGATION up/down to highlight this bar. Then, press NAVIGATION left/right to switch between the menu pages.

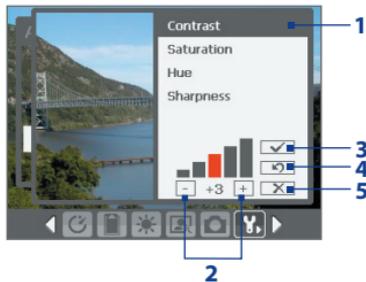
- **Capture Format.** Select the desired file format.
- **Shutter Sound.** Choose whether or not you want the camera to make a shutter sound when you press the ENTER button or the CAMERA button to take photos or record video clips.

- **Grid** (Photo mode only). Choose whether or not to show a grid on the Camera screen. Showing a grid helps you frame and center your subject more easily and accurately.



- **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. Select **No Review** to immediately return to the live Camera screen after capturing.
- **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.** 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, tap **Reset**.
- **Recording Limit.** Specify the maximum time or file size for recording.
- **Template Folder** (in Picture Theme mode 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**.



- 1 In the submenu, tap one of the properties to adjust. Alternatively, press NAVIGATION up/down to select a property.
- 2 To increase/decrease the value, tap the plus/minus icon or press NAVIGATION left/right. The live Camera screen on the background immediately displays the effect of changes.
- 3 Tap to save the settings and close the submenu.
- 4 Tap to reset all properties to their default.
- 5 Tap to close the submenu without applying and saving the changes.

## 11.2 Using Pictures & Videos

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

File Type	File Extensions
<b>Image</b>	*.bmp, *.jpg, *.gif
<b>GIF animation</b>	*.gif
<b>Video</b>	*.avi, *.wmv, *.mp4, *.3gp

You can view the pictures as a slide show, beam them, send them via e-mail, edit them, or set them as the background on the Today screen.

### To copy pictures, GIF animation files, and video clips to your device

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

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

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

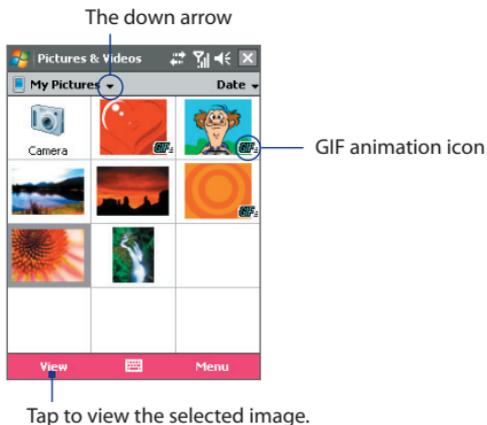
**Note** You can also copy pictures, GIF animation files, and video files from your PC to your device using a memory card. Insert the memory card into the memory card slot on your device, then copy the files from your PC to the folder you created on the memory card.

### To view pictures

1. Tap **Start > Programs > Pictures & Videos**. The images in the My Pictures folder appear as thumbnails by default.
2. Select a picture and tap **View**. If you cannot find a picture in the default My Pictures folder, go to another folder by tapping the Down arrow (▼).

### To play GIF animation files

1. Tap **Start > Programs > Pictures & Videos**.
2. Select a GIF animation file (marked with a ) and tap **View**. The GIF Animation program then opens and plays the animation.



### To play videos with audio

1. Tap **Start > Programs > Pictures & Videos**. By default, the contents of the My Pictures folder will be shown.
2. To find the video clips that you captured, tap the down arrow (▼) next to the My Pictures folder and tap **My Documents > My Videos**. Video clips are displayed as thumbnails by default, which appear with a media icon (🎵).



3. Tap to select a video and play it in Windows Media Player Mobile.

### To view slide shows

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

1. Tap **Start > Programs > Pictures & Videos**.
2. Tap **Menu > Play Slide Show**.

**Note** You can specify how pictures are scaled to optimize their display in a slide show. Tap **Menu > Options**, then tap **Portrait pictures** or **Landscape pictures** on the **Slide Show** tab.

Tap anywhere on the screen to display the Slide Show toolbar, which you can use to stop or pause the slide show, rotate the view, and more.

### To sort pictures and video clips

If you store a large number of pictures or video clips on your device, you may find it helpful to sort them to quickly find a specific picture or clip. You can sort by name, date, and size.

1. Tap **Start > Programs > Pictures & Videos**.
2. Tap the sort list (labeled **Date** by default), and select the item you want to sort by (**Name**, **Date**, or **Size**).

### To delete a picture or video clip

Do any of the following to remove a picture or a video clip:

- Select a picture or video clip on the Pictures & Videos screen, and tap **Menu > Delete**.
- Tap and hold the thumbnail of the picture you want to delete, then tap **Delete**.

Tap **Yes** to confirm the deletion.

### To edit a picture

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

1. Tap **Start > Programs > Pictures & Videos**.
2. Tap the picture you want to edit.
3. Tap **Menu > Edit**, and do any of the following:
  - To rotate a picture 90 degrees clockwise, tap **Rotate**.

- To crop a picture, tap **Menu > Crop**. Next, tap and drag to select the area to crop. Tap inside the box to crop, or tap outside the box to cancel cropping.
- To adjust the brightness and contrast levels of a picture, tap **Menu > Auto Correct**.

**Note** To undo an edit, tap **Menu > Undo**. To cancel all unsaved edits you made to the picture, tap **Revert to Saved**.

### To set a picture as the Today screen background

You can use a picture as the background on the Today screen.

1. Tap **Start > Programs > Pictures & Videos**.
2. Select the picture you want to set as the background.
3. Tap **Menu > Set as Today Background**.
4. In **Transparency level**, select a higher percentage for a more transparent picture, or a lower percentage for a more opaque picture.
5. Tap **OK**.

### To send pictures and video clips via e-mail

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

1. First, set up Messaging to send and receive messages.
2. From the program, select the item you want to send.
3. Tap **Menu > Send**, and select one account (such as Outlook E-mail or MMS) to send the attached item.
4. A new message is created with the item attached.
5. Enter the recipient name and subject, and tap **Send**. The message will be sent the next time you synchronize your device.

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

### To assign pictures to contacts

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

1. Tap **Start > Programs > Pictures & Videos**.
2. Select the picture you want to assign to a contact.

3. Tap **Menu > Save to Contact**.
4. Tap the contact, or navigate and tap **Select** to choose the contact from your Contacts list.

#### To customize more image settings

1. Tap **Start > Programs > Pictures & Videos**.
2. Select the picture for which you want to configure further settings.
3. Tap **Menu > Options**. The Options screen appears, allowing you to:
  - Resize a picture so that it can be sent faster through e-mail.
  - Set the direction of rotation for the Rotate function.
  - Configure the view settings during slide shows and activate screensaver options.

## 11.3 Using Windows Media Player Mobile

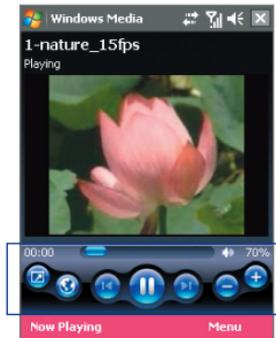
You can use Microsoft Windows Media Player 10 Mobile for Pocket PC to play digital audio and video files that are stored on your device or on a network, such as on a Web site.

Using Windows Media Player Mobile, you can play both audio and video files. These are the following file formats that are supported by this version of Windows Media Player Mobile.

Video File Formats Supported	File Extensions
<ul style="list-style-type: none"> <li>• Windows Media Video</li> <li>• MPEG4 Simple Profile</li> <li>• H.263</li> <li>• Motion JPEG</li> <li>• 3GPP2</li> </ul>	<ul style="list-style-type: none"> <li>• .wmv, .asf</li> <li>• .mp4</li> <li>• .3gp</li> <li>• .avi</li> <li>• .3g2</li> </ul>
Audio File Formats Supported	Video File Formats Supported
<ul style="list-style-type: none"> <li>• Windows Media Audio</li> <li>• MP3</li> <li>• MIDI</li> <li>• AMR Narrow Band</li> <li>• AMR Wide Band</li> <li>• AAC</li> <li>• 3GPP2</li> </ul>	<ul style="list-style-type: none"> <li>• .wma</li> <li>• .mp3</li> <li>• .mid, .midi, .rmi</li> <li>• .amr</li> <li>• .awb</li> <li>• .m4a</li> <li>• .gcp</li> </ul>

## About the controls

The following are available controls on the Windows Media Player Mobile.



Controls on Windows Media Player Mobile

This control	Does this
	Play/Pause a file.
	Display the video in full screen.
	Display a Web site where you can find music and videos to play.
	Adjust the playback progress of a selected file.
	Skip to the beginning of the current file or to the previous file.
	Skip to the next file.
	Decrease the volume level.
	Increase the volume level.
	Turn the sound on or off.

## About the screens and menus

Windows Media Player Mobile 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 any 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, you can open a **Menu**. The commands on this menu vary, depending upon which screen you are viewing. For more information about the commands in these menus, see Help on your device.

## 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 device. Files that have licenses associated with them are called “protected files.”

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

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

## Copy media files to your device

Use the latest version of the desktop Player (Windows Media Player 10 or later) to synchronize digital media files to your device (instead of dragging a file from a folder on your PC to a folder on your device, for example). Using the desktop Player ensures that licenses are copied with protected files.

Always synchronize the files to a storage card that is inserted into your device. Do not synchronize to a storage card that is inserted into a storage card reader. In addition, do not synchronize to the internal storage location (RAM) in your device.

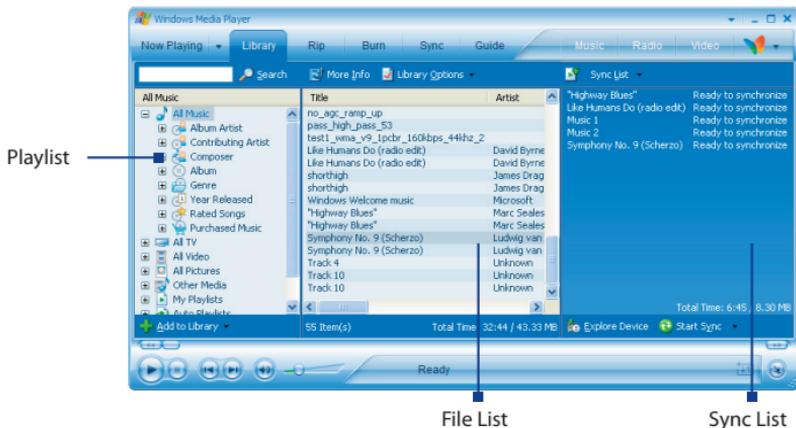
### To synchronize content to your device automatically

1. Power off your device. Insert a 32MB or larger storage card into your device, and turn the power back on.
2. On your PC, start Windows Media Player.
3. Connect your device to your PC.
4. If you have not set up synchronization between your device and PC, the Device Setup Wizard opens on your PC.
5. 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.
6. Click **Finish**.
7. The files begin synchronizing to your device. The next time you connect your device 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 device

1. If you have not set up synchronization between your device and PC, follow steps 1 to 6 in “To synchronize content to your device automatically”, except that you should click **Manual** synchronization.
2. To choose files to synchronize and copy to your device, 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.



**Note** Audio files copy faster if the desktop Player is configured to automatically set the quality level for audio files copied to your device. For more information, see desktop Player Help on the PC.

## Play media

### To play items on your device

Use the library on Windows Media Player Mobile to find and play songs, videos, and playlists that are stored on your device or removable storage card.

1. If you are not on the Library screen, tap **Menu > Library**.
2. On the Library screen, tap the Library arrow (near the top of the screen), then tap the media storage that you want 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 device or storage card. Tap **Menu > Update Library** to manually update the library list.

4. Select a category (for example, My Music or My Playlists).
5. Tap and hold the item that you want to play (such as a song, album, or artist name), then tap **Play**.

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

### To play an item 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, tap **Menu > Library**.
2. Tap **Menu > Open URL**.
3. Do one of the following:
  - In the **URL** box, enter a network address.
  - In the **History** box, tap a URL that you have previously used.

**Note** To play an item on a network, you must be connected to a network. For more information about creating a remote connection between your device and a network, see Connections Help on your device.

## Use playlists

A playlist is a list of digital media files that play in a specified order. By using playlists, you can group audio and video files together for convenient playback.

In the desktop Player, you can create a playlist of media files and synchronize the desktop Player with your device. For more information about synchronizing media, see “Copy media files to your device” earlier in this chapter.

In Windows Media Player Mobile on your device, your playlists are available in the Library under the My Playlists category. There is also a temporary playlist, called Now Playing, which lists the currently playing file, as well

as any files that have been queued up to play next. You can create a new playlist on your device by saving the current Now Playing playlist and by giving it a new name.

### To save a new playlist

1. If you are not on the Library screen, tap **Menu > Library**.
2. Tap to select a category (for example, My Music or My Playlists).
3. Select a media file that you want, then tap **Menu > Queue Up**. This adds the file to the Now Playing list.

Repeat this step until you have added all desired media files to the Now Playing list.

**Note** You cannot select multiple files simultaneously.

4. After adding the media files, tap **Menu > Now Playing**.
5. On the Now Playing screen, tap **Menu > Save Playlist**.
6. Enter the playlist name then tap **Done**.
7. To play back the playlist you created, tap My Playlists in the Library, select your playlist, then tap **Play**.

## Troubleshooting

If you encounter a problem while using the Windows Media Player Mobile, a number of resources are available to help you troubleshoot the issue.

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>).

# Chapter 12

## Managing Your Pocket PC Phone

**12.1 Adding and Removing Programs**

**12.2 Copying Files**

**12.3 Managing Memory**

**12.4 Resetting Your Pocket PC Phone**

**12.5 Checking System Information**

**12.6 Tips and Techniques**



## 12.1 Adding and Removing Programs

Before you purchase additional programs for your device, you should note the model name of your device, the version of Windows Mobile software running on it, and the type of processor. This information will help you select a program that is compatible with your device. For more information, see “To get detailed device information” and “To find the operating system version number” in this chapter.

Programs available for purchase usually include a Setup program (commonly named "setup.exe") that you must first run on your PC. You can then use ActiveSync to add programs to your device, or add a program directly from the Internet.

### To add programs

1. Download the program to your PC (or insert the CD or disk that contains the program into your PC). You may see a single **\*.exe** file, a **\*.zip** file, a Setup.exe file, or several versions of files for different device types and processors. Be sure to select a program designed for your device and processor type.
2. Read any installation instructions or documentation that comes with the program. Many programs provide special installation instructions.
3. Connect your device to the PC.
4. Double-click the **\*.exe** file.
  - If the executable file is an installation wizard, follow the instructions on the screen. The wizard will automatically install the program to your device.
  - If an installation wizard does not start, you will see an error message stating that the program is valid but that it is designed for a different type of computer. You will need to copy this program directly to your device. If you cannot find any installation instructions for the program, use ActiveSync to copy the program file to the Program Files folder on your device.

### To remove programs

You can only remove programs that you installed. Programs that come with your device cannot be removed.

1. Tap **Start > Settings > System tab > Remove Programs**.
2. In the **Programs in storage memory** list, select the program you want to remove, and tap **Remove**.
3. Tap **Yes**. If another confirmation message appears, tap **Yes** again.

## 12.2 Copying Files

You can copy files to your PC using ActiveSync, or copy files to a storage card you insert into your device. Your device has an expansion slot for inserting a microSD card.

Using ActiveSync, you can copy or move information from the PC to your device and vice versa. Copying a file results in separate versions of a file on your device and PC. Because the files are not synchronized, changes made to one file will not affect the other.

**Note** If you want to automatically update information on both your device and PC, synchronize the information instead. For more information about copying and synchronizing files, see ActiveSync Help on your PC.

### To copy files to a storage card

1. Make sure the storage card is properly inserted into your device.
2. Tap **Start > Programs > File Explorer** and navigate to the appropriate folder.
3. Tap and hold the file you want to copy, and tap **Copy**.
4. Tap the folder list (labeled **My Documents** by default) and tap **Storage Card**.
5. Tap **Menu > Edit > Paste**.

### To copy a file between your device and the PC

1. Connect your device to the PC.
2. In ActiveSync, click **Explore**, which opens the Mobile Device folder of your device.
3. To copy a file from your device to your PC:

- a. In the Mobile Device folder, go to the file that you want to copy.
  - b. Right-click the file, then click **Copy**.
  - c. Locate the destination folder on your PC. Right-click the folder, then click **Paste**.
4. To copy a file from your PC to your device:
  - a. On your PC, navigate to the folder that contains the file you want to copy.
  - b. Right-click the file, then click **Copy**.
  - c. Right-click the destination folder under Mobile Device, then click **Paste**.

### To automatically save files on a storage card

In the Word Mobile, Excel Mobile, and Notes programs, you may find it helpful to save all new documents, notes, and workbooks directly on a storage card.

1. From the program file list, tap **Menu > Options**.
2. With a storage card inserted in your device, in the **Save to** box, select the appropriate storage card to automatically save new files on the storage card.
3. Tap **OK**.

**Note** In the file or note list, a storage card symbol (  ) is displayed next to the names of files saved on a storage card.

## 12.3 Managing Memory

You may need to stop a program if it becomes unstable or the program memory is low.

### To see how much memory is available

- Tap **Start > Settings > System tab > Memory**.
- On the **Main** tab, the amount of memory allocated to file and data storage versus program storage is displayed, as well as the amount of memory in use versus the available memory.

### To see available storage card memory

You can see how much memory is available on a storage card that is inserted in your device.

1. Tap **Start > Settings > System tab > Memory**.
2. Tap the **Storage Card** tab.

### To free up program memory

Try the following to free memory on your device:

- Close programs you are not currently using.
- Move e-mail attachments to a storage card.
- Move files to a storage card. Tap **Start > Programs > File Explorer**. Tap and hold the file, and tap **Cut**. Browse to the storage card folder and tap **Menu > Edit > Paste**.
- Delete unnecessary files. Tap **Start > Programs > File Explorer**. Tap and hold the file, and tap **Delete**.
- Delete large files. To find your largest files, tap **Start > Programs > Search**. In the **Type** list, tap **Larger than 64 KB**, and tap **Search**.
- In Internet Explorer Mobile, delete temporary Internet files and clear history information. For more information, see “Internet Explorer Mobile” in Chapter 6.
- Remove programs you no longer use.
- Reset your device.

### To close a program

Tapping the  button in a program may just close the program screen. In this case, the program continues to run in the background. You can end running programs manually by following these steps:

1. Tap **Start > Settings > System tab > Memory > Running Programs** tab.
2. In the **Running Programs List**, tap the program you want to close, and tap **Stop**.

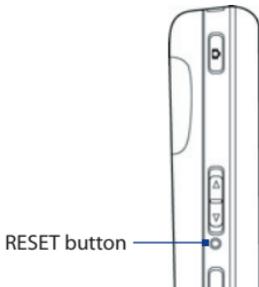
- Tips**
- In most programs, you can also use the on-screen keyboard shortcut **Ctrl+q** to shut down the program.
  - You can configure the  button to directly shut down running programs. For more information, see "To configure the  button using Task Manager".

## 12.4 Resetting Your Pocket PC Phone

Occasionally, you may need to reset your device. A soft (or normal) reset of your device clears all active program memory and shuts down all active programs. This can be useful when your device is running slower than normal, or a program is not performing properly. A soft reset is also necessary after the installation of some programs. If a soft reset is performed when programs are running, unsaved work will be lost.

### To perform a soft reset

- Use the stylus to press the RESET button found on the middle left side of your device. Your device restarts and displays the Today screen.



You can also perform a hard reset (also known as a full reset). A hard reset should be performed only if a normal reset does not solve a system problem. After a hard reset, the device is restored to its default settings - the way it was when you first purchased it and turned it on. Any programs you installed, data you entered, and settings you customized on your device will be lost. Only Windows Mobile software and other pre-installed programs will remain.

### To perform a hard reset

1. Press and hold the left SOFT KEY and the right SOFT KEY, and at the same time, use the stylus to press the RESET button at the middle left side of your device.
2. Release the stylus, but continue pressing the two SOFT KEYS until you see the following message on the screen:

```
This operation will delete
all your personal data,
and reset all settings
to manufacturer default.
Press Send to restore
manufacturer default, or
press other keys to cancel.
```

3. Release the two SOFT KEYS, and then press the  button on your device.

**Warning!** Your device will be set back to factory default settings. Please ensure any additional installed programs and/or user data have been backed up before a hard reset is performed.

## 12.5 Checking System Information

If you want to find out about technical details about your device such as the type or speed of the processor, memory size, etc., you can check under Settings for device information.

### To find the operating system version number

- Tap **Start** > **Settings** > **System** tab > **About**.

The version of the operating system on your device is shown near the top of the About screen.

### To get detailed device information

- Tap **Start** > **Settings** > **System** tab > **About**.

The **Version** tab displays important device information, including the type of processor and the amount of memory that is installed.

## 12.6 Tips and Techniques

### To make the battery last longer

- Tap the battery icon () on the Today screen. On the **Advanced** tab of the **Power** settings screen, you can specify when your device turns off the display to conserve battery power. For optimum conservation, specify 3 minutes or less.
- Use the AC adapter to plug your device into external power whenever possible, especially when using a microSD card or when using a modem or other peripherals.
- Adjust the backlight settings.

# Chapter 12

## Using T-Mobile Services

**9.1 Word Mobile**

**9.2 Excel Mobile**

**9.3 Viewing Slide Shows with  
PowerPoint Mobile**

**9.4 Using Adobe Reader LE**

**9.5 Using MIDlet Manager**

**9.6 Using ZIP**

**9.7 Using Voice Speed Dial**

## 13.1 T-Mobile Xxxxxx

**xxxxx** is a xxxxxx.

xxxxxxx.

**To xxxxx**

**1.** xxxxx.

**2.** xxxxx.

**3.** xxxxx.

xxxxx.

**Note** xxxxx.

## 13.2 T-Mobile Xxxxxx

**xxxxx** is a xxxxxx.

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### To xxxxx

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2. xxxxx.
3. xxxxx.

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- Tips**
- Xxxxxx.
  - Xxxxxxx.

**Note** xxxxx.

## 13.3 T-Mobile Xxxxxx

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- Tips**
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- Notes**
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  - Xxxxxx.





















# Appendix

**A.1 Regulatory Notices**

**A.2 PC Requirement to Run ActiveSync 4.5**

**A.3 Specifications**

## A.1 Regulatory Notices

### Agency identification numbers

For regulatory identification purposes, your product (Pocket PC Phone) is assigned a model number of HERA110. The Battery Pack has been assigned a model number of HERA160.

To ensure continued reliable and safe operation of your device, use only the accessories listed in this document.

**Note** This product is intended to be used with a certified class 2 limited power source, rated 5 volts DC, maximum 1A power supply unit.

### Federal Communications Commission Notice

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.

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 TV reception, which can be determined by turning the equipment on and off, 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 or television technician for help.

- The FCC requires the user to be notified that any changes or modifications made to the device that are not expressly approved by High Tech Computer Corporation may void the user's authority to operate the equipment.

### **Important safety information**

Retain and follow all product safety and operating instructions. Observe all warnings on the product and in the operating instructions.

To reduce the risk of bodily injury, electric shock, fire, and damage to the equipment, observe the following precautions.

### **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.

### **Avoid hot areas**

The product should be placed away from heat sources such as radiators, heat registers, stoves, or other products (including amplifiers) that produce heat.

### **Avoid wet areas**

Never use the product in a wet location.

### **Avoid pushing objects into product**

Never push objects of any kind into cabinet slots or other openings in the product. Slots and openings are provided for ventilation. These openings must not be blocked or covered.

### **Mounting accessories**

Do not use the product on an unstable table, cart, stand, tripod, or bracket. Any mounting of the product should follow the manufacturer's instructions, and should use a mounting accessory recommended by the manufacturer. Do not place the product with an unstable base.

### **Use product with approved equipment**

This product should be used only with personal computers and options identified as suitable for use with your equipment.

### **Adjust the volume**

Turn down the volume before using headphones or other audio devices.

### **Cleaning**

Unplug the product from the wall outlet before cleaning. Do not use liquid cleaners or aerosol cleaners. Use a slightly damp cloth for cleaning, but NEVER use water to clean an LCD screen.

## **Safety precautions for power supply unit**

### **Use the correct external power source**

A product should be operated only from the type of power source indicated on the electrical ratings label. If you are not sure of the type of power source required, consult your authorized service provider or local power company. For a product that operates from battery power or other sources, refer to the operating instructions that are included with the product. **Handle battery packs carefully: This product contains a Lithium-Ion Polymer battery.** There is a risk of fire and burns if the battery pack is handled improperly. Do not attempt to open or service the battery pack. Do not disassemble, crush, puncture, short external contacts or circuits, dispose of in fire or water, or expose a battery pack to temperatures higher than 140° F (60° C).

## Exposure to radio frequency (RF) signals

Your wireless phone is a radio transmitter and receiver. It is designed and manufactured not to exceed the emission limits for exposure to radio frequency (RF) energy. 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 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 phones employs a unit of measurement known as the Specific Absorption Rate, or SAR.

The standard incorporates a substantial margin of safety to give additional protection for the public and to account for any variations in usage. Normal conditions only 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.

## SAR Information

**SAR: 0.717 W/Kg @1g (FCC)**

## **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 the 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 the 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.

## Safety Precautions

**SAFETY IN AIRCRAFT:** This product can cause interference to an aircraft's navigation system and network. In most countries it is against the law to use this product on board an airplane.

**ENVIRONMENTAL SAFETY:** Do not use this product in gas stations, fuel stores, chemical plants and locations containing explosives.

**ROAD SAFETY:** Vehicle drivers in motion are not permitted to use handheld telephony services, except in emergency. In some countries, using hands-free devices as an alternative is allowed.

**MEDICAL EQUIPMENT SAFETY:** This product may cause medical equipment malfunction. In most hospitals or medical centers use of this product is forbidden.

## 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 (shown at the left) 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 center, 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 4.5

To connect your device to the PC, you must have Microsoft® ActiveSync® program installed on your PC. ActiveSync 4.5 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	
<b>Processor</b>	TI's OMAP™ 850, 201 MHz
<b>Memory</b>	- ROM : 128 MB - RAM : 64 MB SDRAM (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).
<b>Operating System</b>	Crossbow
Power	
<b>Battery</b>	Rechargeable Lithium-ion polymer battery, 1130 mAh
<b>Charging Time</b>	Up to 4 hours
<b>Battery Life (estimates)</b>	Standby time: Up to 150 - 200 hours for GSM Talk time (Screen off): Up to 3.5 - 5 hours for GSM Media playback time: Up to 8 hours (WMV); Up to 12 hours (WMA)
<b>AC Adapter</b>	Voltage range/frequency: 100 - 240V AC, 50/60 Hz DC output: 5V and 1A
Display	
<b>LCD Type</b>	2.8" transfective TFT-LCD with backlight LEDs, touch-sensitive screen
<b>Resolution</b>	240 x 320 with 65,536 colors
<b>Alignment</b>	Portrait and Landscape
GSM / GPRS / EDGE Module	
<b>Functionality</b>	Quad-band (850, 900, 1800, and 1900)
<b>Internal Antenna</b>	Yes
Physical	
<b>Dimensions</b>	109 mm (L) x 59 mm (W) x 18 mm (T)
<b>Weight</b>	168g (with battery)

Camera Module	
<b>Type</b>	2 Megapixel color CMOS camera
<b>Resolution</b>	Photo: 1600x1200 (UXGA), 1280x960 (SXGA), 640x480 (VGA), 320x240 (QVGA), 160x120 (QQVGA) Video: 176x144 (QCIF), 128x96
<b>Digital Zoom</b>	Up to 10X
Connections	
<b>I/O Port</b>	HTC ExtUSB™: an 11-pin mini-USB and audio jack in one (ExtUSB is a proprietary connection interface that is trademarked by HTC).
<b>Car Antenna Connector</b>	Yes
<b>Wireless Connections</b>	Bluetooth 2.0, Wi-Fi (IEEE 802.11 b/g)
Controls and Lights	
<b>Buttons</b>	<ul style="list-style-type: none"> <li>• 5-way NAVIGATION Control</li> <li>• Three program buttons : Voice Speed Dial/Voice Record, Camera and Comm Manager</li> <li>• Two phone functions : TALK and END</li> <li>• START button</li> <li>• OK button</li> <li>• Two SOFT KEYS</li> <li>• POWER button</li> <li>• RESET button</li> </ul>
<b>Hardware Keyboard</b>	QWERTY keyboard with two additional SOFT KEYS.
<b>LEDs</b>	<p>The left (bi-color) LED shows Green and Amber lights for GSM/GPRS/EDGE standby, message, and network status as well as for notification and battery charging status.</p> <p>The right LED shows a blinking Blue light for Bluetooth system notification of powered-up and ready to transmit Bluetooth signal, and a blinking Green light for Wi-Fi status. When both Bluetooth and Wi-Fi are enabled, their lights blink alternately.</p>

**Audio****Audio Controller** AGC**Microphone/  
Speaker** Built-in/Dual, Hands-free**Headphone** AMR/AAC/WAV/WMA/MP3 codec**Expansion Slots****Card Slot** microSD™ (SD 2.0 compatible)