# **Resetting the MC95XX**

There are two reset functions, warm boot and cold boot. A warm boot restarts the MC95XX by closing all running programs. A cold boot also restarts the MC95XX, and also initializes some drivers. Data saved in flash memory or a memory card is not lost.

If the MC95XX is not functioning properly, perform a warm boot first. If the MC95XX still does not respond, perform a cold boot.

#### **Performing a Warm Boot**

Hold down the red **Power** button for approximately five seconds. As soon as the MC95XX starts to boot release the **Power** button.

#### **Performing a Cold Boot**

To perform a cold boot, simultaneously press the red **Power** button and the 1 and 9 keys.

# Waking the MC95XX

The wake-up conditions define what actions wake up the mobile computer after it has gone into suspend mode. The mobile computer can go into suspend mode by either pressing the Power button or automatically by Control Panel time-out settings. These settings are configurable and the factory default settings are shown in *Table 3-2* are subject to change/update.

Table 3-2 Wake-up Default Settings

Condition for Wake-up	Power Button	Automatic Time-out
AC power is applied.	No	Yes
Mobile computer is inserted into a cradle.	No	Yes
Mobile computer is removed from a cradle.	No	Yes
Mobile computer is connected to a USB device.	No	Yes
Mobile computer is disconnected from a USB device.	No	Yes
A key is pressed.	No	Yes
The scan triggered is pressed.	No	Yes
The screen is touched.	No	No
Bluetooth communication	Yes	Yes
Incoming phone call (MC9596 and MC9598 only)	Yes	Yes

# **Locking the MC95XX**

You can lock the MC95XX by disabling key presses and screen tap or by requiring a password.

#### **Keypad Locking**

Locking the MC95XX turns off keyboard and touch screen functionality. This is helpful when the MC95XX is turned on and you want to prevent accidental key presses.

To lock the device, tap the **Device unlocked** icon. The icon changes to locked.





Figure 3-2 Device Locked/Unlocked Icons

To unlock the device and free it for use, tap Unlock.



Figure 3-3 Unlock Device Window

Tap **Unlock** on the **Unlock** window.



**NOTE** You can make emergency calls even when the MC95XX is locked. See *Making an Emergency Call on page* 5-9 for more information.

#### **Password Locking**

Use the **Password** window to set a password to disable unauthorized access to the MC95XX.



**NOTE** If the device is configured to connect to a network, use a strong (difficult to figure out) password to help protect network security. Password cracking tools continue to improve and the computers used to crack passwords are more powerful than ever.

1. Tap Start > Settings > Personal tab > Lock icon > Password tab.



Figure 3-4 Password Window - Password Tab

- 2. Select **Prompt if device unused for** check box to enable password protection.
- 3. From the drop-down list, select a time value for the protection to take affect after non-use.
- 4. From the Password type: drop-down list, select either Simple PIN or Strong alphanumeric.
- 5. For a simple password, enter a four-digit password in the **Password** field.

For a stronger password:

- a. Enter a seven character password in the **Password**: field. A strong password must contain at least seven characters and contain at least three of the following: uppercase and lowercase letters, numerals, and punctuation.
- b. Re-enter the password in the Confirm: field.
- **6.** Tap **ok**.
- 7. To set a hint to remember the password, tap the **Hint** tab.



Figure 3-5 Password Window - Hint Tab

- **8.** In the text box, enter a hint for a password reminder.
- Tap ok.

When the MC95XX is not used for a period of time and the user tries to access the device, the Password window appears.



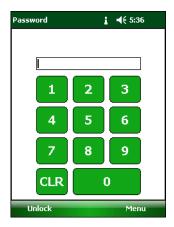




Figure 3-6 Enter Password Windows

Enter the password to un-lock the device.

Tap Unlock.

# **Keypads**

The MC95XX offers four types modular keypad configurations. See Appendix C, Keypads for keypad functionality.

#### **Function Buttons**

The MC95XX's buttons perform certain functions.

- Power: Press the red Power button to place the MC95XX into suspend mode or wake from suspend mode. Also use the Power button to reset the MC95XX by performing a warm or cold boot. See Resetting the MC95XX on page 3-3.
- Scan/Action: Press to scan bar codes or capture images. See Chapter 4, Data Capture. Or, press to open an application or perform a function. See the Microsoft® Applications for Mobile 6 User Guide to set an application to open.
- Volume Up/Down: Press to increase or decrease the MC95XX's volume.
- Action: Press to open an application or perform a function. See the Microsoft® Applications for Windows Mobile 6 User Guide to set an application to open.
- Green Key: Press to open the Phone Dialer window or answer an incoming call or place a call on hold.
- Red Key: Press to end a call.
- Function Keys: Programmable functions for performing specific applications.
  - F1 Left soft key
  - F2 Right soft key
  - F3 Talk (MC9596/8 only), user programmable (MC9590)
  - F4 End Call (MC9596/8 only), user programmable (MC9590)
  - F5 User programmable
  - F6 Volume Up.

# **Stylus**

Use the MC95XX stylus to select items and enter information. The stylus functions as a mouse.

- Tap: Touch the screen once with the stylus to press option buttons and open menu items.
- Tap and Hold: Tap and hold the stylus on an item to see a list of actions available for that item. On the pop-up menu that appears, tap the action to perform.
- Drag: Hold the stylus on the screen and drag across the screen to select text and images. Drag in a list to select multiple items.



**CAUTION** To prevent damage to the screen, do not use any device other than the Motorola-provided stylus.

# **Entering Data**

When entering data on the keypad, use either the single-hand method or the two-hand method as shown in *Figure* 3-7.

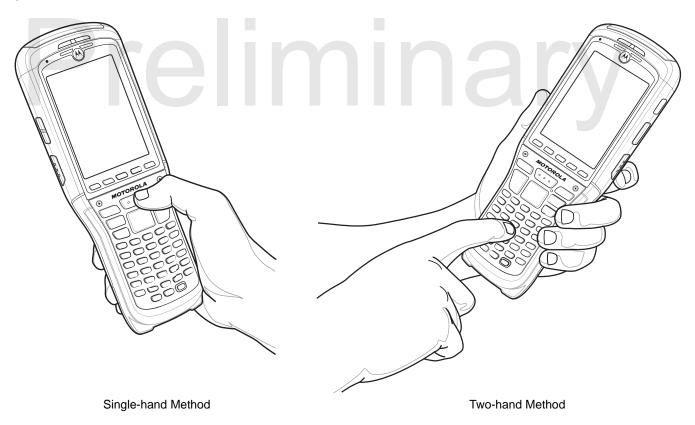


Figure 3-7 Entering Data on the Keypad

# **Interactive Sensing Technology**

This section describes the functionality of the Interactive Sensing Technology (IST) feature on the MC95XX.

The IST supports the following features.

- Power Management manage power by configuring IST to control switching on/off the backlight, control suspend mode of the MC95XX by monitoring motion and orientation.
- Display Orientation switch the screen orientation to either landscape or portrait depending on the MC95XX orientation.
- Gesture Input configure the MC95XX to perform various tasks by monitoring user gestures and reacting to them.
- Free Fall Detection monitors free fall duration and records the time and type of the drop event.

#### **Power Management**

The MC95XX orientation and motion sensitive data can be used as an indicator of MC95XX usage and can be used to manage the battery power of the mobile computer. For example, IST can be configured to control the backlight on and off functionality or go into suspend according to a user gesture by placing screen facing down. It can also be used to keep the MC95XX active while it is in movement to prevent it from quickly going into suspend mode while in use.

#### **Display Orientation**

The screen can be rotated between portrait and landscape modes automatically, depending on the physical orientation of the MC95XX. For example, if the MC95XX is rotated 90° counterclockwise, IST rotates the display counterclockwise 90° so that the screen display appears correct.

This functionality is achieved by monitoring screen angle and rotating the display to counter any changes. IST only rotates the screen in multiples of 90°.

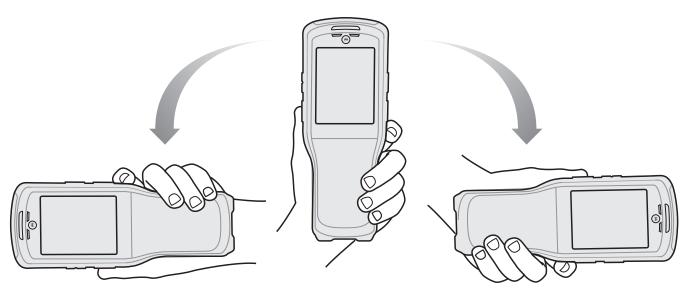


Figure 3-8 Display Orientation

#### **Gesture Input**

Gesture detection can be used to determine user intent and acts accordingly. IST can control screen scrolling line-by-line or page-by page according to a user gesture of flick of the wrist whilst holding the mobile computer.

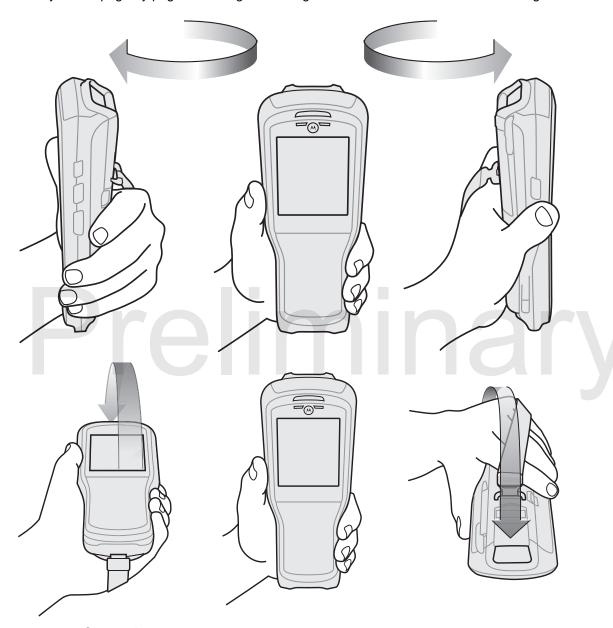


Figure 3-9 Gesture Inputs

#### **Free Fall Detection**

IST continuously monitors gravitational force on the MC95XX according to its current position. When the MC95XX free falls, IST detects the absence of gravitational force and records the event data if it detects a free fall more than 450 ms, which may indicates nearly a one meter drop. This data can be used as an indicator of potential abuse or misuse.

IST features a log for recording the free fall events. This log records the date, time and the time period of the free fall.

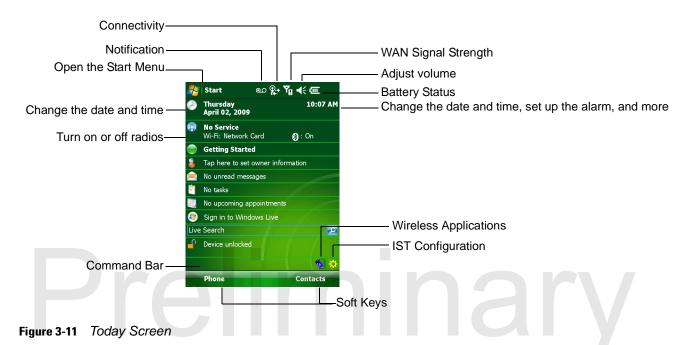


Figure 3-10 Free Fall Detection

Preliminary

# **Today Screen**

The Today screen displays important information, such as upcoming appointments and status indicators. Tap a section on the screen to open the associated program. Alternatively, tap **Start** > **Today** to display the **Today** screen.



To customize the **Today** screen, tap **Start** > **Settings** > **Today** icon. Use the **Appearance** tab to customize the background and the **Items** tab to change the list and order of items that appear on the screen.

#### **Status Icons**

The Navigation bar at the top of the screen can contain the status icons listed in Table 3-3.

Table 3-3 Status Icons

Icon	Function	Description
€!	Notification	Backup Battery Low.
1		Notification that one or more instant messages were received.
⊒⊲		Notification that one or more e-mail/text messages were received.
<u> </u>		Notification that one or more voice messages were received.
₽		There are more notification icons than can be displayed. Tap to display remaining icons.
	1	Indicates a reminder of an upcoming calendar event.

 Table 3-3
 Status Icons (Continued)

Icon	Function	Description
+-+	Connectivity	Connection is active.
+**		Connection is not active.
++		Synchronization is occurring.
I		Wi-Fi available.
$\mathcal{P}$		Wi-Fi in use.
		HSDPA available. (MC9596 only)
		HSDPA connecting. (MC9596 only)
3G		3G available. (MC9596 only)
<u>ਭਰ</u> <b>∔</b> :*		3G connecting. (MC9596 only)
G		GPRS available. (MC9596 only)
₫÷		GPRS connecting. (MC9596 only)
E		EGPRS available. (MC9596 only)
₫,	Jro	EGPRS connecting. (MC9596 only)
		EVDO connecting. (MC9598 only)
1X		1xRTT available. (MC9598 only)
Εv		EVDO Rev. 0 available. (MC9598 only)
E≎		EVDO Rev. A available. (MC9598 only)
zz		Dormant State - no data transmission during a 1x or EVDO connection. (MC9598 only)

 Table 3-3
 Status Icons (Continued)

Icon	Function	Description
وإ	WAN	Call missed.
•		Dialing while no SIM card is installed.
€,il		Voice call in progress.
4		Calls are forwarded.
<i>c</i>		Call on hold.
6/2		Speakerphone is on.
<u> </u>		Antenna/signal icon: wireless on/good signal.
۲×		Antenna/signal icon: wireless off.
٧į		Antenna/signal icon: no service or searching.
		HSDPA in use. (MC9596 only)
3G		3G in use. (MC9596 only)
		GPRS in use. (MC9596 only)
3,1	Jro	EGPRS in use. (MC9596 only)
<b>†</b>		EVDO in use. (MC9598 only)
•		Roaming.
Č		SIM Card not installed. (MC9596 only)
<b>-</b> €	Speaker	All sounds are on.
≠×		All sounds are off.
′Qı		Vibrate is on.
(4)	Battery	Main battery is charging.
C×		Battery power completely depleted.
ᅼ		Main battery is low.
ÇIII		Main battery level.
1:20	Time and Next Appointment	Displays current time in analog or digital format.

The Command Bar at the bottom of the screen can contain the application icons listed in Table 3-4.

 Table 3-4
 Command Bar Icons

Icon	Description	
	Wireless connection status	Indicates WLAN signal strength.
<b>(</b>	Out-of-network range (not associated)	Indicates no wireless LAN network connection. Notify the network administrator.
*	No wireless LAN network card detected	Indicates Wireless LAN disabled or radio disabled. Notify the network administrator.
1	Bluetooth Enabled	Indicates the Bluetooth radio is on. (Displays only if the StoneStreet One Bluetooth stack is enabled)
8	Bluetooth Disabled	Indicates the Bluetooth radio is off. (Displays only if the StoneStreet One Bluetooth stack is enabled)
8	Bluetooth Connection	Indicates the Bluetooth radio is connected to another Bluetooth device. (Displays only if the StoneStreet One Bluetooth stack is enabled)
무미	ActiveSync	Indicates an active serial connection between the MC95XX and the host computer.

# **Programs**

*Table 3-5* lists the default programs on the **Start** menu.

Table 3-5 Programs in the Start Menu

lcon	Name	Description
	Office Mobile	Use the complete suite of Microsoft® Office applications for your mobile device.
		Excel Mobile - Create new workbooks or view and edit Microsoft <sup>®</sup> Excel <sup>®</sup> workbooks.
		OneNote Mobile - Create new notes or view existing notes.
		PowerPoint Mobile - View Microsoft® PowerPoint® slides and presentations.
		Word Mobile - Create, view, and edit Microsoft <sup>®</sup> Word documents.  Refer to the <i>Microsoft Applications for Windows Mobile 6 User Guide</i> for more information.
	Calendar	Keep track of appointments and create meeting requests. Refer to the Microsoft Applications for Windows Mobile 6 User Guide for more information.
2	Contacts	Keep track of friends and colleagues. Refer to the <i>Microsoft Applications for Windows Mobile 6 User Guide</i> for more information.

 Table 3-5
 Programs in the Start Menu

lcon	Name	Description
	Internet Explorer Mobile	Browse Web and WAP sites as well as download new programs and files from the Internet. Refer to the <i>Microsoft Applications for Windows Mobile 6 User Guide</i> for more information.
	Messaging	Send and receive e-mail and text messages. Refer to the <i>Microsoft Applications for Windows Mobile 6 User Guide</i> for more information.
C	Phone	Make and receive calls, switch between calls, and set up conference calling. See Chapter 5, Using the Phone for more information. MC9596 and MC9598 only.
?	Help	See Help topics for the current screen or program.

Table 3-6 lists programs that are listed in the Programs window.

 Table 3-6
 Programs in Program Window

Icon	Name	Description
	ActiveSync	Synchronize information between the MC95XX and a host computer or the Exchange Server. Refer to the MC95XX Series Mobile Computer Integrator Guide for more information.
Air BEAM	AirBEAM	Allows specially designed software packages to be transferred between a host server and the MC95XX. Refer to the MC95XX Series Mobile Computer Integrator Guide for more information.
<b>8</b>	BT Information	Displays information about the Bluetooth radio. See Chapter 7, Using Bluetooth.
	BTExplorer	Manages StoneStreet One Bluetooth connections. Refer to the MC95XX Series Mobile Computer Integrator Guide for more information. Appears only if the StoneStreet One Bluetooth stack is enabled.
***************************************	Calculator	Perform basic arithmetic and calculations, such as addition, subtraction, multiplication, and division. Refer to the <i>Microsoft Applications for Windows Mobile 6 User Guide</i> for more information.
	File Explorer	Organize and manage files on your device. Refer to the <i>Microsoft Applications for Windows Mobile 6 User Guide</i> for more information.
	Getting Started	Provides quick links for setting the devices clock, setting up e-mail, setting a device password, setting a background image and transferring music. Refer to the <i>Microsoft Applications for Windows Mobile 6 User Guide</i> for more information.
	Internet Sharing	Connect a notebook computer to the Internet using the MC95XX's data connection.

 Table 3-6
 Programs in Program Window (Continued)

lcon	Name	Description
28	Messenger	Use this mobile version of Windows Live Messenger. Refer to the Microsoft Applications for Windows Mobile 6 User Guide for more information.
<b>**</b>	MMAX Showcase	Provides a web link to Motorola's featured demos for the MC95XX.
	Modem Link	TBS
•	MSP Agent	Interacts with MSP agents to collect monitoring and asset information to enable the configuration, provisioning, monitoring and troubleshooting of the MC95XX. Refer to the <i>Mobility</i> Services Platform User Guide for more information.
	Notes	Create handwritten or typed notes, drawings, and voice recordings. Refer to the <i>Microsoft Applications for Windows Mobile 6 User Guide</i> for more information.
	Pictures & Videos	View and manage pictures, animated GIFs, and video files. Refer to the <i>Microsoft Applications for Windows Mobile 6 User Guide</i> for more information.
*	Rapid Deployment Client	Facilitates software downloads from a Mobility Services Platform Console FTP server to the MC95XX. Refer to the MC95XX Integrator Guide for more information.
	Remote Desktop Mobile	Log onto Windows NT server type computers and use all of the programs that are available on that computer from the MC95XX.
Q	Search	Search contacts, data, and other information on your MC95XX. Refer to the <i>Microsoft Applications for Windows Mobile 6 User Guide</i> for more information.
	SIM Toolkit	Manage the contacts that are stored on your SIM card. Copy SIM contents to Contacts on the MC95XX. See Chapter 5, Using the Phone for more information. MC9596 and MC9598 only.
M	Task Manager	Enables viewing of memory and CPU allocations and stops running processes. Refer to the <i>Microsoft Applications for Windows Mobile 6 User Guide</i> for more information.
	Tasks	Keep track of your tasks. Refer to the Microsoft Applications for Windows Mobile 6 User Guide for more information.

 Table 3-6
 Programs in Program Window (Continued)

Icon	Name	Description
	Windows Live	Use this mobile version of Windows Live™ to find information on the web. Refer to the <i>Microsoft Applications for Windows Mobile 6 User Guide</i> for more information.
	Windows Media	Play back audio and video files. Refer to the <i>Microsoft Applications for Windows Mobile 6 User Guide</i> for more information.

# **Settings**

*Table 3-7* lists control applications pre installed on the MC95XX. Tap **Start** > **Settings** to open the **Settings** window.

 Table 3-7
 Settings in the Setting Window

lcon	Name	Description	
Personal Ta	Personal Tab		
	Buttons	Assign a program to a button. Refer to the <i>Microsoft Applications for Windows Mobile 6 User Guide</i> for more information.	
	Input	Set options for each of the input methods. Refer to the <i>Microsoft Applications for Windows Mobile 6 User Guide</i> for more information.	
	Lock	Set a password for the MC95XX.	
	Menus	Set what programs appear in the Start menu. Refer to the <i>Microsoft Applications for Windows Mobile 6 User Guide</i> for more information.	
3	Owner Information	Enter personal information on the MC95XX. Refer to the <i>Microsoft Applications for Windows Mobile 6 User Guide</i> for more information.	
<u>e</u>	Phone	Make and receive calls, switch between calls, and set up conference calling. See Chapter 5, Using the Phone for more information. See Chapter 5, Using the Phone for more information. MC9596 and MC9598 only.	
	Sounds & Notifications	Enable sounds for events, notifications, and more, and set the type of notification for different events. Refer to the <i>Microsoft Applications for Windows Mobile 6 User Guide</i> for more information.	
	Today	Customize the appearance and the information to be displayed on the Today screen. Refer to the <i>Microsoft Applications for Windows Mobile 6 User Guide</i> for more information.	

 Table 3-7
 Settings in the Setting Window (Continued)

Icon	Name	Description
System Tab		
	About	View basic information such as the Windows Mobile <sup>®</sup> version and type of processor used on the MC95XX. Refer to the <i>Microsoft Applications</i> for Windows Mobile 6 User Guide for more information.
	Backlight	Set the display backlight time-out and adjust brightness. Refer to the Microsoft Applications for Windows Mobile 6 User Guide for more information.
	Certificates	See information about certificates installed on the MC95XX. Refer to the <i>Microsoft Applications for Windows Mobile 6 User Guide</i> for more information.
<b>(</b>	Clock & Alarms	Set the device clock to the date and time of your locale or to a visiting time zone when you're traveling. Alarms can also be set at specified days and times of a week. Refer to the <i>Microsoft Applications for Windows Mobile 6 User Guide</i> for more information.
	Customer Feedback	Submit feedback on the Windows Mobile 6.1 software. Refer to the Microsoft Applications for Windows Mobile 6 User Guide for more information.
	Encryption	Allow files on a storage card to be encrypted. Encrypted files are readable only on your device.
	Error Reporting	Enable or disable the device's error reporting function. When this function is enabled and a program error occurs, technical data about the state of the program and your computer is logged in a text file and delivered to Microsoft's technical support if you choose to send it. Refer to the <i>Microsoft Applications for Windows Mobile 6 User Guide</i> for more information.
	External GPS	Set the appropriate GPS communication ports, if required. You may need to do this when there are programs on your device that access GPS data or you have connected a GPS receiver to the MC95XX.
**	GPS Setup	View GPS SUPL information.
w?	HAC Settings	Enable or disable the Hearing Aid Compatibility (HAC) feature. See Chapter 5, Using the Phone for more information. MC9596 and MC9598 only.
*	IST Settings	Set the appropriate setting for configuring the device's Interactive Sensing Technology. See
	Keylight	Set the keypad backlight time-out. Refer to the <i>Microsoft Applications</i> for Windows Mobile 6 User Guide for more information.
	L	<u> </u>

 Table 3-7
 Settings in the Setting Window (Continued)

lcon	Name	Description	
<b></b>	Managed Programs	Lists applications that have been installed remotely by your system administrator. Refer to the <i>Microsoft Applications for Windows Mobile 6 User Guide</i> for more information.	
Tilling.	Memory	Check the device memory allocation status and memory card information. Refer to the <i>Microsoft Applications for Windows Mobile 6 User Guide</i> for more information.	
	Phone Info	Displays the phone version information. MC9596 and MC9598 only.	
	Power	Check battery power and set the time-out for turning off the display to conserve battery power. Refer to the <i>Microsoft Applications for Windows Mobile 6 User Guide</i> for more information.	
	Regional Settings	Set the regional configuration to use, including the format for displaying numbers, currency, date, and time on the MC95XX. Refer to the <i>Microsoft Applications for Windows Mobile 6 User Guide</i> for more information.	
	Remove Programs	Remove programs that you installed on the MC95XX. Refer to the Microsoft Applications for Windows Mobile 6 User Guide for more information.	
	Screen	Change the screen orientation, re-calibrate the screen, and change the screen text size. Refer to the <i>Microsoft Applications for Windows Mobile 6 User Guide</i> for more information.	
ini	System Info	Displays the MC95XX's software and hardware information. Refer to the <i>Microsoft Applications for Windows Mobile 6 User Guide</i> for more information.	
M	Task Manager	Enables viewing of memory and CPU allocations and stops running processes. Refer to the <i>Microsoft Applications for Windows Mobile 6 User Guide</i> for more information.	
<b>(</b>	Windows Update	Link to Microsoft's web site and update Windows Mobile® on your device with the latest security patches or fixes. Do not use. Obtain updates from Motorola. Refer to the <i>Microsoft Applications for Windows Mobile 6 User Guide</i> for more information.	
Connections Tab			
••	Beam	Set the device to receive incoming IrDA beams.	
*	Bluetooth	Enables Bluetooth radio and functionality. See	
	Connections	Set up one or more types of modem connections for your device, such as phone dial-up, GPRS, Bluetooth, and more, so that your device can connect to the Internet or a private local network.	

 Table 3-7
 Settings in the Setting Window (Continued)

lcon	Name	Description
	Domain Enroll	Make your device an AD domain member for device management and security. Refer to the <i>Microsoft Applications for Windows Mobile 6 User Guide</i> for more information.
	USB to PC	Enables or disables the enhanced network connectivity. Refer to the Microsoft Applications for Windows Mobile 6 User Guide for more information.
	Wi-Fi	Setup wireless network connection and customize settings. Refer to the Microsoft Applications for Windows Mobile 6 User Guide for more information.
<b>(7)</b>	Wireless Manager	Enables or disables the MC95XX's wireless radios and customizes Wi-Fi and Bluetooth and Phone settings.

# Preliminary

# **Adjusting Volume**

To adjust the system volume using the Speaker icon in the navigation bar:

1. Tap the **Speaker** icon. The **Volume** dialog box appears.



Figure 3-12 Volume Dialog Box

- 2. Tap and move the slide bar to adjust the volume.
- 3. Select the On or Off radio button to turn the volume on or off.

You can also adjust the system volume using the **Sounds & Notifications** window, or use the **Up/Down** button on the side of the MC95XX.

# **Battery Status Indications**

Battery icons appear on the navigation bar indicating the battery power level. When the main battery power falls below a predetermined level the icon indicates the status and a battery dialog box appears indicating the status of the battery.



Figure 3-13 Battery Status Dialog Box

The **Battery** icon always appears in the **navigation bar** when the Today screen is visible. The icon indicates the battery power level. The message displays until the **Dismiss** button is pressed.



Figure 3-14 Battery Icon on the Title Bar

Also view the battery status using the **Power** window. Either:

- Tap the **Battery** icon
- Tap Start > Settings > System tab > Power icon.

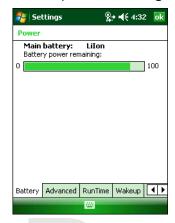


Figure 3-15 Settings Power Window

#### **Battery Reserve Options**

If the charge of the battery reaches a critical threshold, the MC95XX shuts down. This threshold can be changed but affects the amount of time that data can be retained.

1. Tap Start > Settings > System tab > Power icon > RunTime tab. A warning message appears.

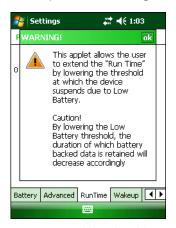


Figure 3-16 Warning Message

2. Read the warning message and tap ok.



Figure 3-17 RunTime Tab

- Select one of the Battery Reserve Options.
  - Option 1: Minimum After a low battery shutdown, data will be retained for minimum amount of time. Battery should be replaced immediately to avoid data loss.
  - Option 2: Less After a low battery shutdown, data will be retained for less than normal amount of time.
  - Option 3: Normal After a low battery shutdown, data will be retained for maximum amount of time.
- Tap ok.

#### **Main Battery Temperature Notifications**

The temperature notification system implements three levels of notification when the temperature within the battery exceeds specific temperature thresholds:

- Level 1: Temperature Watch; this level is similar to main battery low warning. It indicates that the battery
  temperature has reached the first threshold level. The user should move to an environment within proper
  operating temperature.
- Level 2: Temperature Warning; this level is similar to main battery very low warning. It indicates the battery temperature has reached the second threshold level. The user should stop using the MC95XX.
- Level 3: Temperature Error; this level indicates the battery has reached an unusable temperature threshold
  and immediately suspends the MC95XX. This level does not have any graphical notification associated with
  it.



Figure 3-18 Main Battery Temperature Watch Dialog Box



Figure 3-19 Main Battery Temperature Warning Dialog Box



**NOTE** The **Temperature Warning** dialog box remains visible until you tap **Hide**.

# **Using Voice-Over-IP**

The MC95XX supports Voice over IP over WLAN (VoWLAN) using Motorola or third party voice clients. The MC95XX can communicate using VoIP either using the MC95XX supports several audio outputs, including back speaker phone, front receiver or handset, and Bluetooth headset.

It is recommended that the wireless network use the 802.11a (5 GHz) band for voice applications. Using the 5 GHz band avoids some noise sources that may occur on the 802.11b/g (2.4 GHz) band due to wireless interference.

When using a Bluetooth headset with the MC95XX and VoWLAN, it is required to use the Bluetooth Headset profile instead of Hands-free profile. Use the buttons on the MC95XX to answer and end calls. See Chapter 7, Using Bluetooth for information on setting up a Bluetooth Headset Profile.

#### **Infrared Connection**

Using infrared, you can enable short-range file exchange between your MC95XX and another IrDA device.

#### **Exchanging Files using IR Connection**

Ensure that the IrDA function on both the MC95XX and the other device are enabled.

To send files via IrDA connection:

1. Switch to the program where you created the item you want to send and locate the item in the list.



**NOTE** Do not cover or block the IrDA window.

2. Align the IrDA port of the MC95XX with that of the IrDA device so that they are unobstructed and within a close range.

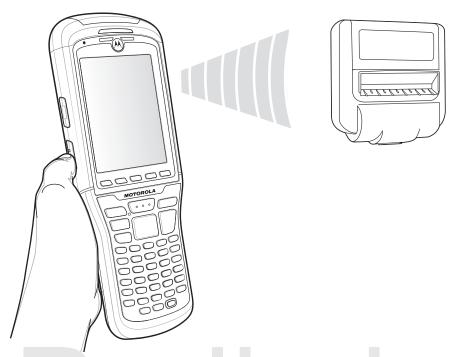


Figure 3-20 Align MC95XX with IrDA Device

- 3. Tap and hold the item, then tap Beam [type of item] on the pop-up menu.
- **4.** Tap the device that you want to send the file to.



Figure 3-21 Beam Contact

To receive files via IrDA connection:

- 1. Align the IrDA port of the MC95XX with that of the other IrDA device so that they are unobstructed and within a close range.
- 2. On the other device, send the file to the MC95XX.



Figure 3-22 Receive File

3. When the Receiving Data dialog displays, tap Yes.

# Preliminary

# **Chapter 4 Data Capture**

#### Introduction

The MC95XX offers three types of data capture options:

- Linear scanning
- **Imaging**
- Digital camera.



NOTE To perform data capture, a scanning enabled application must be installed on the MC95XX. A sample scanning application can be downloaded from the Motorola Support Central site at http://www.motorola.com/enterprisemobility/support.

# **Linear Scanning**

MC95XX with an integrated linear laser scanner have the following features:

- Reading of a variety of bar code symbologies, including the most popular linear, postal, and 1-D code types.
- Intuitive aiming for easy point-and-shoot operation.

#### **Scanning Considerations**

Typically, scanning is a simple matter of aim, scan, and decode and a few quick trial efforts master it. However, consider the following to optimize scanning performance:

Range

Any scanning device decodes well over a particular working range — minimum and maximum distances from the bar code. This range varies according to bar code density and scanning device optics.

Scanning within range brings quick and constant decodes; scanning too close or too far away prevents decodes. Move the scanner closer and further away to find the right working range for the bar codes being scanned.

Angle

Scanning angle is important for promoting quick decodes. When laser beams reflect directly back into the scanner from the bar code, this specular reflection can "blind" the scanner.

To avoid this, scan the bar code so that the beam does not bounce directly back. But don't scan at too sharp an angle; the scanner needs to collect scattered reflections from the scan to make a successful decode. Practice quickly shows what tolerances to work within.

- Hold the MC95XX farther away for larger symbols.
- Move the MC95XX closer for symbols with bars that are close together.



**NOTE** Scanning procedures depend on the application and MC95XX configuration. An application may use different scanning procedures from the one listed above.

#### **Linear Scanning**

- 1. Ensure that a scan enabled application is loaded on the MC95XX.
- 2. Aim the exit window at the bar code.

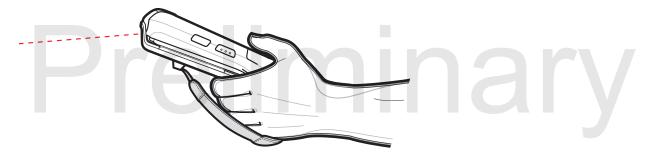


Figure 4-1 Linear Scanning

Press the scan button. Ensure the red scan beam covers the entire bar code. The Decode LED lights red to indicate that scanning is in process, then lights green and a beep sounds, by default, to indicate the bar code was decoded successfully.



Figure 4-2 Linear Scanner Aiming Pattern

### **Imaging**

MC95XX with an integrated imager have the following features:

- Omnidirectional reading of a variety of bar code symbologies, including the most popular linear, postal, PDF417, and 2D matrix code types.
- The ability to capture and download images to a host for a variety of imaging applications.
- Advanced intuitive laser aiming for easy point-and-shoot operation.

The imager uses digital camera technology to take a digital picture of a bar code, stores the resulting image in its memory, and executes state-of-the-art software decoding algorithms to extract the data from the image.

#### **Operational Modes**

MC95XX with an integrated imager support three modes of operation, listed below. Activate each mode pressing the **Scan** button.

• **Decode Mode**: In this mode, the MC95XX attempts to locate and decode enabled bar codes within its field of view. The imager remains in this mode as long as you hold the scan button, or until it decodes a bar code.



**NOTE** To enable Pick List Mode, download the Control Panel applet from the Support Central web site at <a href="http://www.motorola.com/enterprisemobility/support">http://www.motorola.com/enterprisemobility/support</a>. Pick List can also be set in an application using a API command.

- Pick List Mode: This mode allows you to selectively decode a bar code when more than one bar code is in
  the MC95XX's field of view. To accomplish this, move the aiming crosshair center dot over the required bar
  code to decode only that bar code. This feature is ideal for pick lists containing multiple bar codes and
  manufacturing or transport labels containing more than one bar code type (either 1D or 2D).
- **Image Capture Mode**: Use this mode to capture an image within the MC95XX's field of view. This is useful for capturing signatures or images of items like damaged boxes.

#### **Imager Scanning**

- 1. Ensure that a scan-enabled application is loaded on the MC95XX.
- 2. Aim the exit window at the bar code.
- 3. Press the scan button.

The red laser aiming pattern turns on to assist in aiming. Ensure the cross-hair is on top of the bar code.

The Decode LED lights red to indicate that scanning is in process, then lights green and a beep sounds, by default, to indicate the bar code was decoded successfully. Note that when the MC95XX is in Pick List Mode, the imager does not decode the bar code until the crosshair center dot touches the bar code.



Figure 4-3 Imager Aiming Pattern: Bar Code Centered



Figure 4-4 Pick List Mode with Multiple Bar Codes

4. Release the scan button.

NOTE Imager decoding usually occurs instantaneously. The MC95XX repeats the steps required to take a digital picture (image) of a poor or difficult bar code as long as the scan button remains pressed.

# **Digital Camera**

MC95XX with an integrated digital camera have the following features:

- Omnidirectional reading of a variety of bar code symbologies, including the most popular linear, postal, PDF417, and 2D matrix code types.
- Advanced intuitive aiming for easy point-and-shoot operation
- Photo capture
- Video capture.

#### **Digital Camera Scanning**

The camera uses digital camera technology to take a digital picture of a bar code, stores the resulting image in its memory, and executes state-of-the-art software decoding algorithms to extract the data from the image.

- Ensure that a scan-enabled application is loaded on the MC95XX.
- Aim the camera lens on the back of the MC95XX at a bar code.
- Press and hold the scan button. A preview window appears on the display window with a red aiming reticle in the center. The Decode LED lights red to indicate that scanning is in process.



Figure 4-5 Sample Scan Application with Preview Window

- Move the MC95XX until the red aiming reticle is over the bar code to scan.
- The Decode LED lights green and a beep sounds, by default, to indicate the bar code was decoded successfully.



NOTE The camera decode feature is set by default to automatically decode the bar code when read. This feature can be programmed to display a green aiming rectile upon good decode indicating that the bar code has been successfully decoded and to release the scan button.

#### **Taking Photos**



NOTE Ensure that the scanning/imaging application is disabled prior to enabling the camera.

To take a photo:

- 1. Tap Start > Programs > Pictures & Videos icon.
- 2. Tap Camera on the command bar.
- 3. Check the image on the view finder, adjust if necessary.
- 4. Press the **Enter** key to take the picture. Hold the MC95XX still until the shutter sound is heard.

#### **Recording Video**



NOTE Ensure that the scanning/imaging application is disabled prior to enabling the camera.

To record a video clip:

- 1. Tap Start > Programs > Pictures & Videos icon.
- 2. Tap Camera on the command bar.
- 3. Tap Menu > Video to set shooting mode to video.

The available recording time displays on the screen.



**NOTE** By default, the time limit for recording videos is set to 30 seconds.

Press the Enter key to begin recording.
 Recording stops when you press the Enter button again.

# **Viewing Photos and Videos**

To view photos and video clips:

- 1. Tap Start > Programs > Pictures & Videos icon.
- 2. Tap the picture or video clip to view.

# Preliminary

# **Chapter 5 Using the Phone**

#### Introduction

Use the MC9596and MC9598 to make phone calls, set up speed dials, keep track of calls, and send text messages. Your wireless service provider may also provide other services such as voice mail, call forwarding, and caller ID.

Also use the integrated phone to connect to an ISP or work network in order to browse the Web and read e-mail. Connect to the Internet or work network over High-Speed Downlink Packet Access (HSDPA) (MC9596) or Evolution Data-Optimized (EvDO) (MC9598) using Cellular Line, or using the modem specified by the mobile operator. For more information, or to customize the MC95XX phone by changing phone settings, see the MC95XXSeries Mobile Computer Integrator Guide.

# **Accessing the Phone Keypad**



**NOTE** Keypads vary depending on services and the state of the phone.

Access the keypad regardless of the program in use. Applications on the MC95XX can be in use during a call.

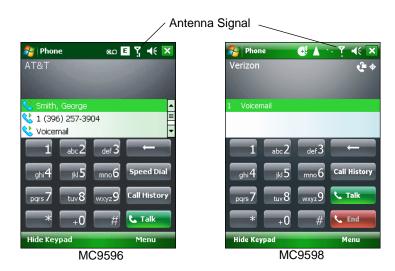


Figure 5-1 Phone Keypads

To access the phone keypad tap **Start > Phone**, press the F1 key or press the green key.

To receive calls when the MC95XX is suspended, leave the phone radio turned on and ensure the MC95XX is set to wake with any key.

# **Turning the Phone On and Off**

Windows Mobile 6.1 devices include Wireless Manager, which provides a simple method of enabling and disabling the phone.

To open Wireless Manager, tap the Connectivity icon.

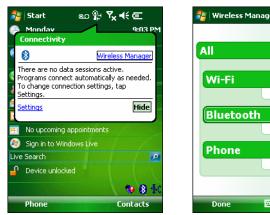




Figure 5-2 Opening Wireless Manager

Select Wireless Manager. The Wireless Manager window appears.

To toggle on or off the phone, tap **Phone** bar.

To configure settings for a connection, tap **Menu > Phone Settings**.



**NOTE** To receive calls when your device is suspended, leave the phone turned on.

#### **Audio Modes**

The MC95XX offers three audio modes for use during phone calls:

- **Handset Mode**: Switches audio to the speaker at the top front of the MC95XX, so you can use the MC95XX as a handset. This is the default mode.
- **Speaker Mode**: Use the MC95XX as if on speaker phone. Tap the **Speaker On** button to activate this mode. Tap the **Speaker Off** button to switch back to handset mode.
- Headset Mode: Connect a Bluetooth headset or a wired headset to automatically switch audio to the headset.

The MC95XX defaults to handset mode. When a wired headset is plugged into the MC95XX headset connector or a Bluetooth headset is configured for use with the MC95XX, the earpiece and speakerphone are muted and audio is heard through the headset.



**NOTE** While using a Bluetooth headset during a call, the mobile computer will not go into suspend mode.

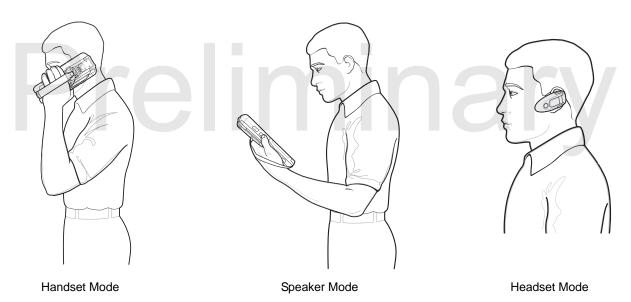


Figure 5-3 Audio Modes

#### **Using a Wired Headset**

You can use a stereo headset for audio communication when using an audio-enabled application. To use a headset, plug the headset jack of the Headset Adapter Cable into the headset connector on the side of the MC95XX. Plug the Headset connector into the connector on the Headset Adapter Cable. Set the MC95XX's volume appropriately before putting the headset on. Plugging a headset into the jack mutes the speaker.

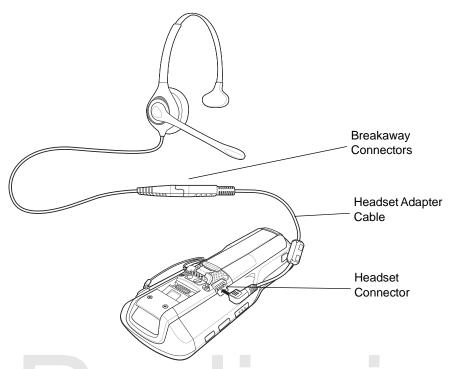


Figure 5-4 Using a Headset

#### **Using a Bluetooth Headset**

You can use a Bluetooth headset for audio communication when using an audio-enabled application. See Chapter 7, Using Bluetooth for information on connecting a Bluetooth headset to the MC95XX. Set the MC95XX's volume appropriately before putting the headset on. When a Bluetooth headset is connected the speakerphone is muted.

It is recommended for phone conversations to use the Bluetooth Hands-free profile instead of the Headset profile. See Chapter 7, Using Bluetooth for more information.



**NOTE** When using a Bluetooth headset, during a call, the MC95XX power button is disabled and the MC95XX will not go into suspend mode. Once the call is completed, the power button functionality is enabled.

The following dialog box displays when a Bluetooth headset connection is established and the power button is pressed.



Figure 5-5 WWAN Bluetooth Audio Notification Dialog Box

#### **Adjusting Audio Volume**

Use the Volume Control Slider or the keypad keys to adjust the volume of the ringer when not in a call and the audio volume when in a call.

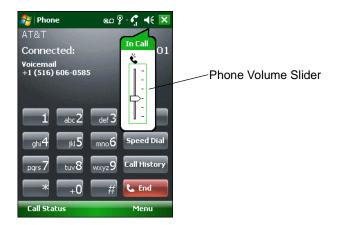


Figure 5-6 Phone Volume Slider

To adjust the volume tap the **Speaker** icon in the **Title** bar. Move the slider up or down to adjust the volume.



**NOTE** Adjust the conversation phone volume during a call. Adjusting the volume while not in a call affects the ring and notification sound levels.

# **Hearing Aid Compatibility Setting**

To set the HAC setting:

Tap Start > Settings > System > HAC Settings icon. The HAC Settings window appears.



Figure 5-7 HAC Settings Window

To enable the HAC feature, tap the **Enable HAC** radio button.

To disable the HAC feature, tap the **Disable HAC** radio button.

# **Making a Call**



**NOTE** You can make emergency calls even when the MC95XX is locked or when a SIM card is not installed. See *Making an Emergency Call on page 5-9* for more information.

With the MC95XX, you can make a call from the phone, contacts, speed dial and call history.

#### **Using the Phone**

To make a call using the phone keypad:

- 1. Tap **Start > Phone** or press the green key.
- 2. From the **Phone** keypad, tap the number to call.
- 3. Tap Talk.
- 4. Tap **End** to stop dialing or end the call.



NOTE Alternatively, use the green and red keys on the MC95XX function key to dial (green) and end (red) calls.

If you tap a wrong number, tap Delete key to erase each subsequent digit of a number. To erase the entire number, tap and hold the Delete key.

#### **Using Contacts**

Use Contacts to make a call without looking up or entering the phone number.

To make a call from Contacts:

- 1. Tap Start > Contacts.
- 2. From the contact list, tap and hold the contact name.
- 3. Tap Call Work, Call Home or Call Mobile.



**NOTE** To make a call from an open contact, tap the number to call. See On-Device Help for more information about Contacts.

#### **Creating an Outlook Contact**



**NOTE** When entering a contact phone number that contains a star (\*) character followed by a plus (+) character, save the contact as an Outlook Contact. Do not save the contact to a SIM card.

To create an Outlook contact:

- 1. Tap Start > Contacts.
- 2. Tap New.
- If the Phone is on the Select Contact Type window displays. Select Outlook Contact.

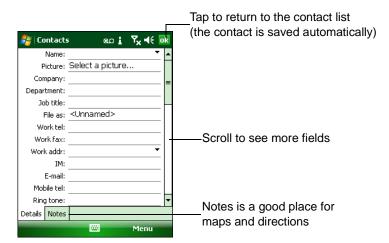


Figure 5-8 Creating a Contact

- 4. Using the input panel, tap in each field and enter contact information as needed. Scroll down to see all fields.
- 5. Tap the arrow next to the Name: or Home addr: field to open a window for adding more details.
- 6. To assign the contact to a category, tap Categories.
- 7. To select one or more categories for the contact, select their check boxes. This allows displaying contacts by category in the contact list.
- 8. Tap **New** to add a category.
- 9. Enter the name for the category in the text box, and tap ok.
- **10.** Tap **ok**.
- 11. To add notes, tap the **Notes** tab and enter text, draw, or create a recording.
- **12.** When finished, tap **ok** to return to the contact list.

#### **Editing an Outlook Contact**

To make changes to a contact:

- 1. Tap Start > Contacts.
- 2. Tap the contact in the contact list to open it.
- 3. Tap **Menu** > **Edit** and make the changes.
- 4. Tap ok.

#### **Deleting a Contact**

To delete a contact:

- 1. Tap Start > Contacts.
- 2. Tap and hold the contact in the contact list and select **Delete Contact** from the pop-up menu, or select the contact and tap **Menu** > **Delete Contact**.

#### **Creating a SIM Contact**

To create a SIM contact:



**NOTE** When entering a contact phone number that contains a star (\*) character followed by a plus (+) character, save the contact as an Outlook Contact. Do not save the contact to a SIM card.

- Tap Start > Contacts.
- 2. Tap New.
- 3. Select SIM Contact.



Figure 5-9 Creating a SIM Contact

- 4. Using the input panel, tap in each field and enter contact information.
- 5. When finished, tap ok to return to the contact list.

#### **Using Call History**

To make a call using Call History:

- 1. Tap **Start** > **Phone** or press the green key.
- 2. From the Phone keypad, tap Call History.



Figure 5-10 Call History

3. Tap the phone icon next to the number to begin dialing and return to the phone keypad.

4. Tap **End** or press the red key to stop dialing or end the call.

#### **Making a Speed Dial Call**

Use Speed Dial to call someone saved in the speed dial directory.

To make a speed dial call:

- 1. Tap **Start** > **Phone** or press the green key.
- 2. From the Phone keypad, tap and hold the speed dial location number assigned to a contact. (To dial a one-digit speed dial location number, tap and hold the speed dial number. To dial a two-digit speed dial location number, tap the first digit and then tap and hold the second digit.)

or

From the Phone keypad, tap **Speed Dial** and tap the speed dial location number of the desired contact in the list.



Figure 5-11 Speed Dial Contact List

3. To stop dialing or end the call, tap End or press the red key.

# **Making an Emergency Call**

Your service provider programs one or more emergency phone numbers, such as 911 or 999, that you can call under any circumstances, even when your phone is locked or the SIM card is not inserted. Your service provider can program additional emergency numbers into your SIM card. However, your SIM card must be inserted in your phone in order to use the numbers stored on it. See your service provider for additional information.

When the alpha-numeric keypad is locked, press the Orange key twice to set the keypad to numeric mode and then enter the emergency number.



**NOTE** Emergency numbers vary by country. Your phone's pre-programmed emergency number(s) may not work in all locations, and sometimes an emergency call cannot be placed due to network, environmental, or interference issues.

#### **Answering a Call**

A dialog box appears on the MC95XX when it receives an incoming call. If the phone is set to ring, a ring tone sounds. Answer or ignore the incoming call.

To answer an incoming call tap **Answer** on the **Phone** > **Incoming...** dialog or press the green key.



Figure 5-12 Incoming Call

To ignore the incoming call tap **Ignore**. This may send the caller to voice mail, depending on the service provider. Otherwise, this presents **Busy** to the calling party.

To end the call tap **End** or press the red key.

#### **Incoming Call Features**

- If you receive a call while in a call, tap Wait to place the call in call waiting.
- You can use other programs on the MC95XX during a call. To switch back to Phone, tap Talk or tap Start >
  Phone. Tap End to end the call.
- If a caller isn't in your contact list, create a contact during the call or from Call History by tapping Menu > Save to Contacts.
- To terminate a call when a second call comes in and answer the waiting call, tap End on the Phone keypad to
  disconnect the active call, then tap Answer or press the Send key to answer the waiting call.
- To hold the current call and answer a waiting call, tap **Answer** or press the **Send** key to place the current call on hold and answer the incoming call.
- To put a call on hold to call another number or answer an incoming call, tap Hold. To move from one call to another, tap Swap.

# **Smart Dialing**

Smart Dialing makes it easy to dial a phone number. When you start entering numbers or characters, Smart Dialing automatically searches and sorts the contact entries on the SIM card, in Contacts, and the phone numbers in Call History (including incoming, outgoing, and missed calls). You can then select the desired number or contact from the filtered list to dial.

Open the Phone screen, then tap the keys on the Phone keypad that correspond to the phone number or contact to call. The contact panel lists contacts that match the sequence that you entered.

Smart Dialing starts looking for numbers or contacts that match the sequence entered.

To find a phone number:

- Enter the first one or two digits to find a phone number in Call History.
- Enter the first three digits or more to find a phone number from the saved Contacts and SIM card.

To find a contact name:

- Enter the first letter of a contact's first name or last name. Smart Dialing searches for the letter starting from the first character of a contact name as well as from the character that appears after a space, dash, or underscore in a contact name. For example, if you tap number "2" which is associated with [a, b, c] on the Phone keypad, contact names such as the following will be considered matches: "Smith, Bernard", "Adams, John", "Carlson, Eileen", "Dillon, Albert", "Childs, Larry", "Cooper, Robert" and "Parks, Celine".
- If the matching list is long narrow down the search further by entering another letter. Using the same example above, tap "3" which is associated with (d, e, f), the matching list is narrowed down to the following names: "Smith, Bernard", "Adams, John", and "Parks, Celine".



Figure 5-13 Finding a Contact

To make a call or send a text message using Smart Dialing:

- 1. Begin entering the first few numbers or characters.
- 2. In the Smart Dialing panel, use the up and down arrows on the keypad to navigate to the desired contact or phone number.
- 3. When the correct contact is selected, press **TALK** to make a voice call.
- 4. To send a text message to the selected contact, tap **Menu** > **Send Text Message**.
- 5. To call a different phone number associated with the selected contact, tap the contact name and select the phone number to call.

### **Muting a Call**

During a call, you can mute the microphone so you can hear the person on the line but he or she cannot hear conversation from the microphone. This is useful when there is conversation or background noise on your end.

To mute or unmute a call:

- 1. Tap **Start** > **Phone** or press the green key.
- Make a call.
- 3. Tap **Mute** on the display to mute the audio. The **Mute** icon appears.



Figure 5-14 Mute Button and Icon

### **Taking Notes**

To create a note during a call, tap **Note** on the display, then enter the note. For more information about creating notes see the Windows On-Device Help.

To access a note created during a call:

- 1. Tap Start > Phone or press the green key.
- 2. From the Phone keypad, tap Call History.
- 3. Tap and hold the number or the **Note** icon for the phone call entry containing the note.



Figure 5-15 Call History - Notes Menu

- 4. Tap View Note.
- 5. Tap ok to exit.

1

**NOTE** Also access notes directly from the Notes application by tapping **Start > Programs > Notes**.

# **Using Speed Dial**

Create speed dial numbers to dial frequently called numbers with a single tap. Before creating a speed dial entry, ensure the phone number exists in Contacts.

#### **Adding a Speed Dial Entry**

To add a speed dial entry from the phone keypad:

- 1. Ensure the contact and phone number are in the Contacts list.
- 2. Tap **Start** > **Phone** or press the green key.
- 3. Tap Speed Dial > Menu > New.



Figure 5-16 Contacts

4. Tap the desired contact name and number in the list.



Figure 5-17 Speed Dial Contact Location

- 5. In the **Location** field, tap the up/down arrows to select an available location to assign as the new speed dial entry. The first speed dial location is reserved for voice mail.
- 6. Tap **ok** to add the contact to the speed dial list.
- 7. Tap ok to exit the Speed Dial Contact List.

To add a speed dial entry from the **Contacts** window:

1. Tap Start > Contacts.

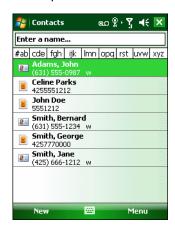




Figure 5-18 Contacts

- 2. Tap a contact name.
- 3. Tap Menu > Add to Speed Dial.



Figure 5-19 Speed Dial Contact Location

- **4.** Tap the up/down arrows to select an available location to assign as the new speed dial entry. The first speed dial location is reserved for voice mail.
- **5.** Tap **ok**.

#### **Editing a Speed Dial Entry**

- 1. Tap **Start** > **Phone** or press the green key.
- 2. Tap Speed Dial.





Figure 5-20 Speed Dial Contact List

- 3. Tap and hold the contact name.
- 4. Tap Edit.....
- **5.** Change the name, phone number, or location information.
- **6.** Tap **ok**.
- **J**

**NOTE** Editing names and phone numbers in **Speed Dial** does not alter contact information in **Contacts** (**Start** > **Contacts**).

#### **Deleting a Speed Dial Entry**

- Tap Start > Phone or press the green key.
- 2. Tap Speed Dial.
- 3. Tap and hold the contact name.



Figure 5-21 Speed Dial Delete Menu

- 4. Tap Delete.
- 5. Tap **Yes** to confirm permanently deleting the speed dial entry.



**NOTE** Deleting names and phone numbers in *Speed Dial* does not delete the contact information in **Contacts** (**Start** > **Contacts**).