Motorola
CN620 Dual Network
WLAN/Cellular Phone

User's Guide

Second Draft
04/08/04

6864255H01

IMPORTANT NOTICE: PLEASE READ PRIOR TO USING YOUR PHONE

The SIM card provided in this kit is intended for use with the CN620 phone provided in this package.

For more information on SIM card compatibility, go to www.motorola.com/xxxxxx.

Contents

iv

Getting Started

The CN620 phone has dual network functionality. It uses Wireless Local Area Network (WLAN) as the on-campus wireless data network at your enterprise/company. It uses GSM cellular network outside the range of your enterprise/company.

What's Included in the Box

The following items are included; CN620 Phone, Battery Door, Battery, Battery Charger (mid rate), SIM Card, Holster, and User Guide.

To start using your CN620 phone:

- Make sure your SIM card is in place (see "Locating Your SIM Card" on page 5).
- Charge the battery.
- Activate your service via the Enterprise.

Ear Piece

Internal Display Screen

Menu Key

Right Soft Key

Left Soft Key

Navigation Dial

OK Key

Power End Key

Send Key

Speaker phone Key

Mute Key

Hold Key

Light Sensor

Microphone

Getting Started

Mini Stubby Antenna

External Display Screen

Volume Controls

Instant Voice Button (multi-functional), Send call to Voice Mail, Voice Dialing

Audio Jack

Speaker (in back)

Accessory Connector for charging the battery

Navigation Dial — pressing the different segments allows you to access the features on your phone's idle screen.

● **OK key** — selects highlighted item and can close an editor; (located in the center of the Navigation Dial).

MENU **Menu key** — accesses context-sensitive menus.

Left Soft key — selects the option appearing above it on the display.

Right Soft key — selects the option appearing above it on the display.

Send key — places phone calls.

Mute key — mutes and unmutes phone calls.

HOLD **Hold key** — puts calls on hold.

Speaker key — puts call on speaker phone.

Power button/End key — Powers phone On/Off and ends phone calls; returns to idle screen.

2

Battery

Removing the Battery Door

1 Make sure the phone is powered off.
2 Slide the release button down until it releases the battery door.
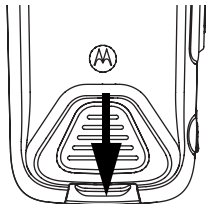
3 Allow the battery door to pop up, slide it forward, over the antenna and remove it from the back of your phone.
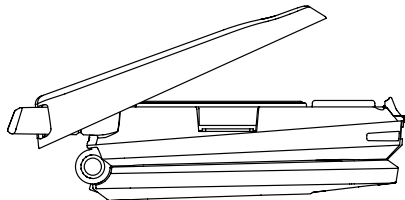
Inserting the Battery

1 Remove the battery door.
2 Insert the top of the battery (gold contacts down) into the battery area. Press the bottom of the battery to secure it.

Battery Top   Insert Battery in This Direction
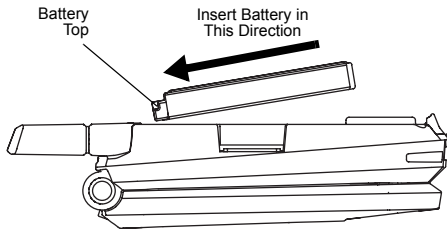
3 Replace the battery door over the antenna and press it gently until you hear a click.
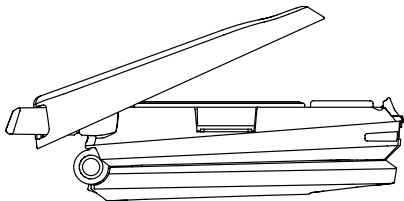
Charging the Battery

Your phone comes with a battery charger.

1 Plug the charger into an electrical outlet.
2 Plug the other end of the charger into the accessory connector.
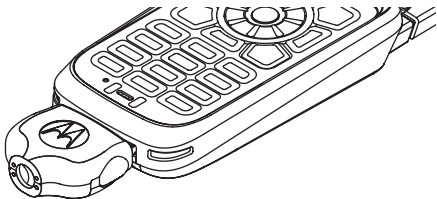
Tip: To remove the charger from the accessory connector: Press the buttons on the sides of the plug. Pull the plug straight out.

3 When charging the battery for the first time, charge for 30 minutes longer than the time shown in "Charging Times".

Charging Times

See your battery and charger to determine the appropriate charging time.

Battery	Charger (Mid-Rate)
Slim	2.5 hours
High Performance	3.5 hours

For best results, charge the batteries within the temperature range of 50°F to 104°F (10°C to 40°C).

Removing the Battery

1 With your phone powered off, remove the battery door.

2 Remove the battery by pushing the battery toward the antenna and lifting it out.

Battery Use and Maintenance

• The Motorola Approved Lithium Ion chargers provide optimum performance. Other chargers may not fully charge the Lithium Ion battery or may yield a reduced number of lifetime charge cycles.

• Extreme temperatures degrade battery performance. Do not store the battery where temperatures exceed 140°F (60°C) or fall below 4°F (-20°C).

• Lithium Ion batteries have a self discharge rate and without use, lose about 1% of their charge per day.

• The battery capacity is degraded if the battery is stored for long periods while fully charged. If long term storage is required, store at half capacity.

Locating Your SIM Card

Your SIM (Subscriber Identity Module) card is a small piece of plastic located in the SIM card holder in the back of your phone, underneath the battery.
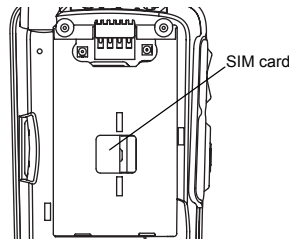
SIM card

If your SIM card is not in the SIM card holder, it may be in the box your phone came in, attached to a piece of white plastic about the size of a credit card. If this is the case, carefully detach your SIM card from the surrounding plastic and insert it as described in "Inserting Your SIM Card".

If there is no SIM card in your phone or the box, contact your service provider.

Inserting and Removing Your SIM Card

Important: Do not touch the gold-colored areas of your SIM card.

Inserting Your SIM Card

1 With your phone powered off, remove the battery door and battery. See "Removing the Battery" on page 4.

2 Hold your SIM card as shown. Do not touch the gold-colored area.

cut corner
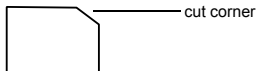
3 Carefully slide your SIM card to into your phone, until it lines up with the marks above and below the SIM card holder.

SIM card holder
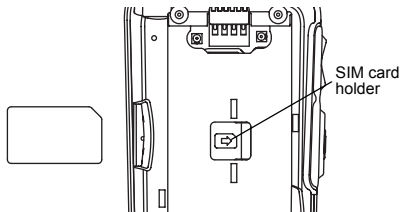
Removing Your SIM Card

Important: To avoid loss or damage, do not remove your SIM card from your phone unless absolutely necessary.

When you change your SIM card the following information is erased:

• WLAN data profile
• User names
• Password
• GSM Call forwarding settings
• Net alerts
• SMS messages

• Contacts that have been copied from your phone to the SIM

  Note: Calendar events and Voice Tags are not erased.

1 With your phone powered off, remove the battery door and battery. See "Removing the Battery" on page 4.

2 Slide your SIM card out of the SIM card holder. Do not touch the gold-colored area.

SIM card holder
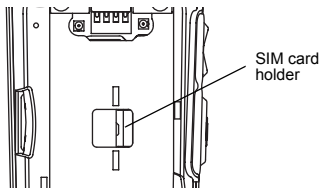
Note: Protect your SIM card as you would any delicate object. Store it carefully.

SIM Card Security

Your SIM card protects your personal information. Your Contacts information is stored to the phone memory and can be manually copied to the SIM card. Since some information is stored on your SIM card, not in your phone. By removing your SIM card, some of your personal information will be removed.

Note: Except for making emergency calls, your phone will not function without the SIM card.

To prevent unauthorized use of your phone, your SIM card is protected by a PIN that you enter each time the phone is powered on if you have this feature turned on.

Entering Your SIM PIN

You may be required to enter a SIM PIN when you first use your phone.The SIM PIN is 4 to 8 digits (check with your service provider).

Note: It is recommended that you change your SIM PIN to prevent fraudulent use of the SIM card should you lose your phone (see "Changing Your SIM PIN" on page 60).

7

Important: If you enter your PIN incorrectly 3 times, your SIM card is blocked. To unblock your SIM card, you must contact your service provider. See "Unblocking the SIM Card PIN Code" on page 60.

1 When the **Enter SIM PIN Code** screen appears, enter your SIM PIN. An asterisk appears for each character entered.

2 Press ●.

Note: The SIM determines whether the PIN requirement can be turned on or off. If your SIM does not allow this, this option is removed from the securities settings option list. It is recommended that you do not turn off the PIN requirement

Note: You can change the PIN or turn off the requirement that it be entered.

Turning the PIN Requirement On and Off

Note: The SIM card determines whether the PIN requirement can be turned on or off. If your SIM does not allow this, this option is removed from the securities settings option list.

When the SIM PIN requirement is on, you are prompted to enter your PIN each time you turn on your phone.

Note: If a SIM PIN is required, your phone will not function until the SIM PIN is entered, except for making emergency calls.

Important: When the SIM PIN requirement is off, the personal data on your SIM card is not protected. Anyone can use your phone and access your personal data.

1 From the idle screen, select **Settings > Security > SIM PIN**.

2 Select **On** or **Off**.

3 Enter the current SIM PIN.

4 Press ●.

Powering Up/Powering Down

To power your phone on:

1 Open the flip.

2 Press ⌷.

To power your phone off:

1 Open the flip.

2 Press and hold ⌷.

When You Power On For the First Time

As your phone connects to the network, you will see a welcome message and a connecting message. When the idle screen appears, the phone is ready to use.

When the phone is powered up in the WLAN environment you are usually prompted to enter a user name and password. (You may not be prompted to enter a user name and password if the password has been changed or the phone has been reset).

You may also be prompted for a user name and password when you enter WLAN from a GSM cellular environment.

The network search process starts immediately after powering on.

After a valid network has been found, the phone attempts to register.

The WLAN network then downloads the WLAN phone number to your phone.

Finding Your Phone Number

Your CN620 phone has two phone numbers — your Enterprise (WLAN) number and your GSM cellular number.

My Info lets you view your two numbers (WLAN and GSM Cellular), Instant Voice ID, and other phone information:

1 From the idle screen press ◌ under **Shortcuts**.

2 Press ●.

3 Scroll to **My Info**.

4 Press ●.

5 Scroll to **My Tel. Numbers**

6 Press ●.

7 Scroll to see your information:

- **GSM Line 1** — Enter your name and phone number (number from your service provider).
- **GSM Line 2** — Enter your name and phone number (number from your service provider).

  Note: GSM Line 2 will not be displayed if the SIM card is not set up for 2 numbers.

- **WLAN Line 1** — shows your WLAN phone number.
- **Instant Voice ID** — Your Instant Voice ID is the number that others use to contact you using Instant Voice calls.

Using the Displays

Your CN620 phone has 2 displays, a small external and a large internal display. The external display shows a shortened version of the internal display. To see more information open the flip to see the internal display.

Using the Idle Screen

Any time your phone is powered on, the idle screen on the internal display provides you with information and options. From the idle screen you can select different applications and features using the navigation dial. This allows you quick access to items such as Voice mail, the Web Contacts list, Calendar, Email, Settings, Call Log, and Apps without having to call up the Main Menu.

,.
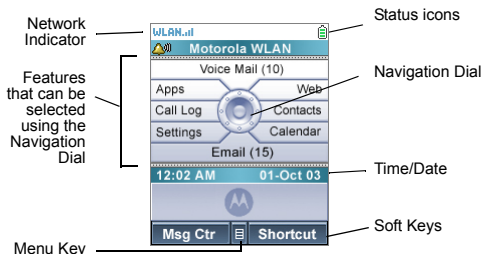
Network Color Indicator

The network indicator and the idle screen color change depending which network (WLAN or GSM cellular) your phone is on.

Navigation Dial

The navigation dial is the round key on the upper part of the keypad. It has 8 segments around its perimeter for selecting applications from the idle screen. Clicking a segment twice of the navigation dial selects an item. The round button in the middle is the OK Select key (●).

OK Select Key

Pressing ●:

- Selects the highlighted menu item or list item
- Sets options
- Confirms actions
- Closes Editors
- Follows Links on Forms

Menu Key

Many features provide context-sensitive menus that let you access related features and actions. This icon ▤ appears any time a context-sensitive menu is available. Press 〔MENU〕 to access the menu.

Soft Keys

Two options appear at the bottom of most screens. You select an option by pressing the right (◌) or left (◌) soft key below the option.

Menus

Your phone's features are arranged in menus, submenus, and lists. Some features are accessible from the idle screen.

To access the Main Menu from the idle screen, press 〔MENU〕.

To access the items in a menu or list, scroll using the navigation dial at the top of your keypad. Holding down the appropriate segment of the navigation dial speeds up scrolling.

In this guide, this symbol **>** tells you to select a menu or list item. For example, **Settings > Security** means:

1 Select **Settings** on the idle screen.
2 Press ● to see the **Settings** screen.
3 Scroll to **Security**.
4 Press ● to see the **Security** screen.

Main Menu

All your phone's features can be accessed through the main menu. From the idle screen, press MENU. This displays the Main Menu items (shown in bold). Select a Main Menu item and press ● to display the the submenu items.

	Tasks [New Task]	List of "To Do's"
🖃	**Message Center** Short Msgs Create Message Voicemail Email Browser Msgs Info Srvcs Quick Notes Outbox Drafts	Access and send messages.
📱	**Shortcuts**	Allows quick access to screens. See page 45.
📲	**Web**	Browse the Web.

📇	**Contacts** [New Entry]	View, store, edit contacts. See page 39.
✎	**Calendar** new event form list of events	Schedule appointments. See page 41.
	Settings Sounds Phone Status Security Headset Settings Car Settings Initial Setup Network Settings Timers and Meters Call Settings Extended Services	Customize your phone. See page 63.
	Call Log	View recent calls.
📚	**Apps**	Access applications.
🖳	**Other**	

Status Icons

Status icons appear at the top of the display. Some appear at all times. Others appear only when your phone is engaged in certain activities or when you have activated certain features.

Note: The Ring, Vibrate, and Silent icons are displayed on the second line of the idle screen.

Battery Strength — A fuller battery indicates a greater charge.

Signal Strength GSM — More bars next to the antenna indicate a stronger signal.

Signal Strength WLAN — More bars next to the antenna indicate a stronger signal.

Device Management Active —

VPN Active — Virtual Private Network is active.

GPRS In use — In GSM data is being transferred to and from the browser.

CSD In use — In GSM data is being transferred via a Circuit Switch.

GPRS Available — In GSM data is not being transferred to and from the browser.

Phone In Use — Your phone is active on a phone call.

Instant Voice Active — Instant Voice is active.

Call Forwarding WLAN — WLAN Call Forwarding is turned on.

Call Forwarding GSM — GSM Call Forwarding is turned on.

Ringer Off — Your phone is set not to ring. See page 51.

⊠ 📧 📨 **New Message** — You have one or
📩 📬 more voicemails. See

      New Voicemail — You have one or
more messages.

🔊 🔈 **Speakerphone On** — Speakerphone
is turned on.

🔌 🔌 **Battery Charging** — Indicates the
battery is charging.

🔋 🔋 **Battery Meter** — Shows the status of
your battery.

      Ring — Your phone is set to ring.

      Vibrate — Your phone is set to vibrate.

      Ring and Vibrate — Your phone is set
to ring and vibrate.

      Silent — Your phone is set to silent.

Status Indicators/Notifications

NEED INPUT

Making and Receiving Calls

Your phone makes three types of calls: WLAN phone calls, GSM cellular phone calls and Instant Voice calls. With Instant Voice calls, you use your phone as a two-way radio.

Call Handover Feature

Your CN620 phone can "hand out" an active call from a WLAN network to the GSM cellular network when you travel beyond the WLAN network range.

Only PBX anchored calls can "hand in" (GSM cellular to WLAN). Calls on hold will be dropped.

If the call is not PBX anchored, the handover will not occur and the call remains on the GSM cellular network.

Calls to either WLAN network or to GSM cellular network ring in either network.

This allows seamless mobility from one network to the other.

> **Note:** PBX features are not available in the Wide Area Network.

Dialing

Call Appearance Screen

The Call Appearance screen on the internal display shows the phone numbers of the calls that are on going. The active call information is displayed above on the screen.

Other calls (i.e. calls on hold) are also displayed and you can toggle between calls, highlighting another call and press ●. The menu display the options for this call

WLAN and GSM Phone Calls

With the Flip Open

1 Enter the number you want to call.
2 To place the call:

 Press ⬚.
3 To end the call:

 Press ⬚. **-or-**

 Close the flip.

Ways to Enter a Number

• Use the numbers on the keypad
• Select the number from the call log

- Select the number from the Contacts list
- Redial the last phone number called
- Use voice activated dialing
- Use Speed Dial or Turbo Dial®
- Use a TTY device

From the Call Log List

The recent calls list or Call Log stores the last 25 calls you made or received.

With the Flip Open

1 From the idle screen, select **Call Log**.
2 Scroll to the name or number you want to call.
3 If multiple number types are stored you can scroll left or right to select the desire number type.
4 With the number selected, Press ⬚.

From Contacts

If you have numbers stored in Contacts, you can use these numbers to make calls. For information on entering numbers into Contacts, see Creating a Contacts Entry.

1 From the idle screen, select **Contacts**.
2 Scroll to the name or number you want to call.

   Tip: To find Contacts entries faster, use the keypad to enter the first letter of the name.

3 Press ⬚. **-or-**

   Scroll left or right to display the Contacts type for the number you want to call.

If you are making an Instant Voice call, your phone will not place the call to the Instant Voice ID stored in the Contacts entry, if the Instant Voice icon is not displayed.

If you are making a phone call:

- Your phone places the call to the phone number assigned to the Contacts type displayed.
- If the Contacts type displayed is not a phone number, your phone places the call to the phone number stored in the Contacts entry.
- If the Contacts type displayed is not a phone number and you have more than one phone number stored in the Contacts entry, your phone prompts you to select the phone number you want to place the call to.

Redialing the Last Number

Press and hold ⬚ to select the last number from the Call Log.

Abbreviated Dialing

Abbreviated dialing in a WLAN network allows you to dial just the extension number in your enterprise network and not the entire 10 digit number

Using Speed Dial and Turbo Dial®

Each phone number stored in Contacts can be assigned the next available Speed Dial and Turbo Dial number or one can be entered from the keypad.

Speed Dial and Turbo Dial is only available for dialing phone numbers not Instant Voice ID's.

Speed Dial

1 From the idle screen, use the keypad to enter the Speed Dial number (1 through 1000) assigned to the phone number you want to call.

2 Press `#`.

3 Press `$.

Turbo Dial

From the idle screen, press and hold the Speed Dial number (1 through 9) assigned to the phone number you want to call.

Using Voice Activated Dialing

If you have created a voice tag in Contacts for the number you want to call, say the voice tag into your phone to enter the number. Voice dialing is only available for dialing phone numbers not Instant Voice ID's.

You can use a voice tag to enter a number with the flip open or closed.

1 Press and hold the Instant Voice button until a prompt appears telling you to say the voice name.

2 Speaking into the microphone, say the voice name assigned to the number you want to call.

Your phone plays the name back to you.

If you are making a phone call, the call is placed automatically.

> **Tip:** To stop a phone call from being completed, press the Instant Voice button if the flip is closed or press `$.

Creating Pauses, Waits and Insert "n" Function

When storing a number, you can program your phone to pause or wait between digits while dialing. A pause makes your phone pause for 3 seconds before dialing further. A wait makes your phone wait for your response before dialing further.

This feature is useful when using voice mail or other automated phone systems that require you to dial a phone number and then enter an access number.

The insert "n" function allows you to insert a number when the number is dialed.

To program a pause:

Press and hold ⬛✱⬛ until the letter P appears. The P represents a 3-second pause.

If you store 17035551235P1234, when you select this number and make a call, your phone dials the first 11 digits, pauses for 3 seconds, then dials the last 4 digits.

If you want a pause longer than 3 seconds, press and hold ⬛✱⬛ more than once. Each P represents a 3-second pause.

To program a wait:

Press and hold ⬛✱⬛ until the letter W appears. The W means your phone waits before dialing further.

If you store 17035551235W1234, when you select this number and make a call, your phone dials the first 11 digits and then waits. A message appears asking if you want to send the rest of the digits. Press ⬤ under **Yes** to dial the last 4 digits.

To insert the "n" function:

Press and hold ⬛✱⬛ until the letter n appears. The n represents a number to be inserted at the time of dialing.

If you store 17035551235n1234, when you select this number and make a call, your phone prompts you to enter the number represented by the "n". The entered number is then included in the number dialed.

International Numbers

Note: This feature may not be offered by your service provider.

When storing a number that you plan to use for international calls, use Plus Dialing:

1 Press and hold ⬛0+⬛ for two seconds. A "0" appears, then changes to a "+".

  Note: The network translates the "+" into the appropriate international access code needed to place the call.

2 Enter the country code, city code or area code, and phone number.

  Note: Your WLAN enterprise network must set up to support international dialing or it will only be available for GSM cellular.

Making TTY Calls

Note: This feature may not be offered by your service provider.

To use your phone to make phone calls using a teletypewriter (TTY) device:

1 Connect one end of a 2.5 mm cable into the audio jack on your phone. Connect the other end of the cable to your TTY device.

2 Make sure that your phone's TTY feature is on and select the TTY mode you want to use.

3 Use your phone to enter phone numbers and make calls.

When you make a TTY call, these icons appear on the phone's display:

🕮   Phone call is active.

🕮   Phone call is on hold.

TTY device features such as Turbo-Code, High-Speed, and Interruption are not supported by your phone. These features must be turned off or disabled to use your TTY device with your phone.

Turning On the TTY Feature

Your phone's TTY feature must be on if you want to make TTY calls, set the TTY mode, or change the TTY baud rate. To make sure the TTY feature is on:

From the idle screen, select **Settings > Initial Setup > TTY Setup**.

Choosing a Mode

Your phone supports these TTY modes:

- **TTY** — You type and read text on your TTY device.
- **VCO** (Voice-Carry-Over) — You speak into your phone and read text replies on your TTY device.
- **HCO** (Hearing-Carry-Over) — You type text on your TTY device and listen to voice replies on your phone speaker.

To change mode while not in a call:

1 From the idle screen, select **Settings > Initial Setup > TTY**.

2 Select the TTY mode you want.

When you make a TTY call, the call begins in the TTY mode you last selected.

- "VCO" — to select VCO mode
- "HCO" — to select HCO mode

• Off" — to turn off TTY

Making Emergency Phone Calls

Your phone supports emergency calling. Emergency phone calls can be made even when your SIM card is blocked or not in your phone.

Dial 911 to be connected to an emergency response center. If you are on an active call, you must end it before calling 911.

> **Important:** **If you have not registered on the network, emergency calls cannot be placed while your SIM card is in your phone. Enterprise emergency calling will only succeed if it is supported on an enterprise phone systems.**

Receiving Calls

Phone Calls

When you receive a phone call, your phone rings, vibrates, or lights up its backlight.

Answering

Press 🔃. **-or-**

Press ⦿ under **Accept**.

To answer a call by opening the flip, you must have the "Open to Answer" feature turned on (see Answer Options). To answer a call by pressing any key on the keypad, you must have the Multi-Key feature turned on see "Answer Options". You can also set you phone to "Auto Answer" under "Answer Options" and it will automatically answer a call when the phone rings.

Sending to Voice Mail

If the flip is closed, press the Instant Voice button located on the side of the phone. **-or-**

Press 🔃. **-or-**

Press ⦿ under **Ignore**.

Ending Calls

Press 🔃. **-or-**

Close the flip.

Caller ID

Caller ID of the calling parting is displayed on both the internal and external display.

Call Waiting

Call Waiting lets you receive an additional call while on an active call. The availability of Call Waiting is network dependent and is not available if "Call Appearances" are full.

If you are on a call and receive an additional call, your phone emits a tone and displays a message that you are receiving a second call.

To accept the second call and put the active call on hold:

1 Press ⊙ under **Accept**.

To accept the second call and end the active call:

2 Press ⌷.

Your phone rings with the second call.

3 Answer the second call.

To decline the second call:

4 Press ⊙ under **Ignore**

Missed Phone Calls

When you miss a call, this icon ℣☻ and the number of phone calls you have missed appear briefly.

With the Flip Open

If you want to dismiss the missed call message, press ⊙ under **Exit**. **-or-**

If you want to view the details of the missed call on the call log list, press ●.

With the Flip Closed

If you want to dismiss the missed call message, press the Instant Voice button.

Instant Voice

Calling

1 Open the flip, and enter the Instant Voice ID you want to call.
2 Press and hold the Instant Voice button on the side of your phone. Begin talking after your phone emits a chirping sound.
3 Release the Instant Voice button to listen.

Receiving Instant Voice Calls

When you receive an Instant Voice call, your phone emits a chirping sound or vibrates.

1 Wait for the caller to finish speaking.
2 Press and hold the Instant Voice button located on the side of your phone. Begin talking after your phone emits a chirping sound.
3 Release the Instant Voice button to listen.

Call Alerts

Sending a call alert (only available in WLAN) lets the recipient know you want to talk to him or her on a Instant Voice call.

When you send a call alert, the recipient's phone emits a series of beeps and displays your name or Instant Voice ID.

The recipient can:

• **Answer** — begin a Instant Voice call with the sender
• **Clear** — dismiss and delete the call alert

Sending Call Alerts

1 Enter the Instant Voice ID you want to send to, as you would when making a Instant Voice call.
2 Press the Instant Voice Call button until "Alerting" appears on the display.

Note: If the alert is not successful, this may mean the person you are trying to reach is on a call or has the phone turned off.

Receiving Call Alerts

When you receive a call alert, you must answer, or clear it. You cannot receive phone calls or Instant Voice calls until you do.

To answer a call alert:

Press the Instant Voice button to make a Instant Voice call to the sender.

To clear a call alert:

1 Press ●. **-or-**
2 Press ☉ under **Clear**. **-or-**
3 If the flip is closed, press the Instant Voice button.

Note: The Call Log also stores call alerts you have received. They appear as Instant Voice calls. Call alerts remain in your recent calls list until you delete them or until they reach the end of the list.

Ending Calls

1 Press 🔚. **-or-**
2 Close the flip.

Managing Calls

Multiple Call Appearances

While on an active call, you can make additional calls:

1 Place a call as you would normally.

2 Press ⊙ under **New Call**.

3 Enter the second phone number you want to call or press ⊙ under **Contacts** to select the number.

4 Press ⑂ to place the call.

5 After the second call is connected you can switch between the 2 calls with the navigation dial and press ⑂.

Your CN620 phone supports multiple call appearances allowing up to 4 calls in the WLAN network and 2 calls in the GSM cellular network.

Calls on Hold
Active Call
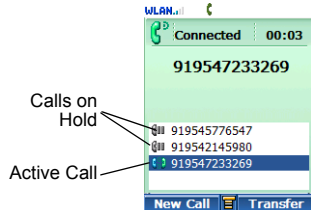
Using Speakerphone

Turning on speakerphone makes incoming sound come out of the phone's speaker instead of the earpiece. Speakerphone is available whenever you are on an active phone call.

With the Flip Open

To turn speakerphone on or off:

Press 🔊.

Putting a Call on Hold

1 While on an active call, press ⌜HOLD⌝.

2 If you want to make the call active again, press ⌜HOLD⌝

Muting a Call

Muting calls lets you listen to incoming sound without transmitting sound. Mute is available whenever you are on an active call.

1 To mute a call, press 🔇.

2 If you want to make the call active again, press 🔇.

Putting a Call on Hold, Making a Second Call

1 Place or receive a phone call.
2 While the call is active, press `HOLD`.
3 Press ⊙ under **New Call**.
4 Enter the second phone number you want to call.
5 Press ⌽ to place the call.

To end the second call and make the call on hold active again:

Press ⌽.

To make the call on hold active and put the active call on hold:

1 Scroll to call on hold.
2 Press ●.

Transferring a Call

Announced

1 Place or receive a phone call.
2 Press ⊙ under **Transfer**.
3 Enter the phone number you want to transfer the call to, or press `MENU` select **Contacts** to select the number.

4 Press ⌽ to place the call.
5 You'll be prompted to "Announce call before transferring?".
6 Press ⊙ under **Yes**.
7 After the call is connected, announce the transfer.
8 You'll be prompted to "Complete transfer?".
9 Press ⊙ under **Yes** and the call is transferred.

Unannounced

1 Place or receive a phone call.
2 Press ⊙ under **Transfer**.
3 Enter the phone number you want to transfer the call to, or press `MENU` select **Contacts** to select the number.
4 Press ⌽ to place the call.
5 You'll be prompted to "Announce call before transferring?".
6 Press ⊙ under **No**.
7 The call is transferred.

Conferencing

Combining, Hosting, or Participating in a Call

1 Place or receive a phone call.

 2 Press ◌ under **New Call**.
 3 Enter the second phone number you want to call
   or press ◌ under **Contacts** to select the number.
 4 With the navigation dial scroll to the non-active
   call.
 5 Press ◌ under **Conf**.

Up to 6 people in the call can speak to and hear
each other.

   Note: Conference calls are shown as
           "Conference Call" on the call appearance
           list.

Message Center

To access your voice mail messages, text and numeric messages, Net alerts, and any other types of messages you are able to receive, go to the message center:

1 From the idle screen, press ⊙ under **Msg Cntr**.

2 Select the type of message you want to access.

The message center shows how many messages you have of each type. You can listen to, read, or delete these messages.

Voice Mail

> **Note:** Voice mail resides only on the Enterprise voice mail system.

When you receive a voice mail message, **New Voice Mail Message** appears on the display.

> Press ⊙ under **Call**.

To dismiss the message notification:

> If the flip is open, press ● or press ⊙ under **Back**, or close the flip.

> This icon ⍨ appears on the display, reminding you that you have a new message.

Sending Unanswered Calls to Voice Mail

To send a phone call to voice mail instead of answering it:

> If the flip is closed, press the Instant Voice button.
> **-or-**

> With the flip open, press ⍾.

> If the caller leaves a message, this icon ⍨ appears on the display, reminding you that you have a new message.

Entering Text

You can enter text into your phone using the traditional method of pressing a key several times for each character, or by pressing a key once for each letter while words likely to be the one you want are chosen from a database. You can also enter symbols and numbers into a text field.

In screens that require you to enter text, you see the following icons. These icons tell you which text input mode you are using:

- ᵃ⌨ **Alpha** — Press a key several times for each character.

- ᵃ⌨ **Word** — Press a key once for each letter while words likely to be the one you want are chosen from a database.

- 🔣 **Symbols** — Enter punctuation and other symbols.

- 🔢 **Numeric** — Enter numbers.

To choose a text input mode:

1 At a screen that requires you to enter text, press `MENU`.

2 Select the text input mode you want to use. Then press ●.

Using Alpha Mode

- Press any key on the keypad to enter the letters, numbers, and symbols on that key. For example, to enter the letter Y, press `9wxyz` three times.

- Type a letter then scroll up to make that letter uppercase, or type a letter then scroll down to make that letter lowercase.

- See "Special Function Keys" on page 29 for more information on adding spaces, capitalization, and punctuation.

Using Word Mode

In Word mode, T9 Text Input analyzes the letters on the keypad button you press and arranges them to create words. As you type, T9 Text Input matches your keystrokes to words in its database and displays the most commonly used matching word. You can add you own words to this database.

Entering a Word

1 Select Word as your text input mode.

2 Type a word by pressing one key for each letter.

For example, to type "test" press `8tuv` `3def` `7pqrs` `8tuv`.

The displayed word may change as you type it. Do not try to correct the word as you go. Type to the end of the word before editing.

3 If the word that appears is not the desired word, press `0+` to change the word on the display to the next most likely word in the database.

Repeat until the desired word appears.

If the desired word does not appear, you can add it to the database.

Adding Words to the Database

1 Select Alpha as your text input mode.
2 Type the word using Alpha mode.
3 Select Word as your text input mode.
4 Press `#`.

The word you typed in Alpha text entry mode is now in the database.

Note: You cannot store alphanumeric combinations, such as Y2K.

Choosing a Language

To change the language of the database:

1 At a screen that requires you to enter text, press `MENU`.
2 Select **Languages**.
3 Select the language you want for your database.

Special Function Keys

Some of the phone's keys assume different functions while in Alpha or Word mode.

Spaces

Press the right segment on the navigation dial for a space.

Capitalization

When you press and hold the `#` key, it acts as a 3-way toggle. Press and hold `#` to make the next letter typed uppercase (shift), to make all subsequent letters typed uppercase (caps lock), or to go back to lowercase letters.

These icons appear in the top row of your display:

  ᴬ⇡ or ᴬ⇡ Shift is on.

  ᴬ⇣ or ᴬ⇣ Caps lock is on.

When neither of these icons appear, letters typed are lowercase. Scrolling up after typing a letter makes that letter uppercase.

Note: Your phone automatically makes the first letter of a sentence uppercase.

Punctuation

Press `1` or `0+` to insert punctuation. Continue to press the key to view the list of symbols available through that key. Pause to select the symbol you want.

Note: Additional punctuation symbols are available in Symbols mode.

29

Using Numeric Mode

1 Select Numeric as your text input mode.
2 Press the number buttons on your keypad to enter numbers.

Using Symbols Mode

1 Select Symbols as your text input mode.

A symbols matrix is displayed. Scroll left or right up or down using the navigation dial to highlight the desired symbol.

2 Press ● to select the highlighted symbol.

Email

Reading from the Message Center

1 From the Idle screen, select ☺ below **Msg Cntr** and select the inbox (Email, Browser or Info Services) that has the message you want to read.
2 Select the message you want to read.
3 If the message fills more than one screen, scroll to read it.

4 To keep the message, press ●. **-or-**

To delete the message, then press ☺ under **Delete**. **-or-**

If **Delete** is not one of your options, press ⌴MENU⌴ and select **Delete**.

Message Notifications

When you receive a message, your phone displays a message icon and a notification tone or vibration. You can access the message or dismiss the notification.

If you dismiss the notification, the message is not deleted. It can be accessed through the message center.

If you are not on a phone call when you receive a message, your phone sounds a notification tone periodically until you access the message or dismiss the alert.

If you are on a call when you receive a message, your phone may sound a notification tone during the call or after you end the call, depending on how you set your notification options.

Setting Message /Notification Options

To assign what type of tone or vibration pattern your phone generates for message notification, see "Assigning Ring Tones".

Locking and Unlocking Messages

When you lock a message, it cannot be deleted until you unlock it.

Locking a Message

1 From the idle screen, press ☉ under **Msg Cntr > Email, Brwsr Msgs,** or **Info Srvc** Inbox.
2 Scroll to the message you want to lock or unlock.
3 Press ☒.
4 Select **Lock**.
5 Press ●.

Unlocking a Message

1 From the idle screen, press ☉ under **Msg Cntr > Email, Brwsr Msgs,** or **Info Srvc** Inbox.
2 Scroll to the message you want to lock or unlock.
3 Press ☉ under **Unlock**.
4 Press ●.

Managing Memory

Your Email, Browser Messages, and Info Services inbox, outbox, and drafts folder have a set amount of memory available for storing messages.

The text inbox holds approximately 20 messages depending on the message size. If the text inbox is full, you cannot receive messages until you delete some.

The outbox and drafts folder share memory space. Together they can hold approximately 30 messages depending on the message size. If the outbox and drafts folder memory is full, you cannot send messages or save drafts until you delete some.

To view the amount of memory available in your text inbox:

1 From the idle screen, press ☉ under **Msg Cntr**.
2 Press ☒ under **Memory Meter**.

The memory meter shows you how much memory is available.

Short Messaging Service (SMS)

Text and Numeric Messages (GSM only)

The phone's display refers to text and numeric messages as Text Messages.

In GSM mode, these messages can be up to 160 letters long. Each stored message is stamped with the date and time it was left.

If your phone is powered off when you receive a text message, your phone notifies you the next time you power it on (GSM only).

Your phone attempts to deliver these messages for the amount of time you selected when you set up your messaging information.

Tip: While reading a text message that contains a phone number, you can press 🛈 to call that number.

Receiving a Message

When you receive a text message, this icon ✉ appears on the display.

To view the message:

1 If a new message dialog is displayed, press ⊙ under **Read**.
2 If the message fills more than one screen, scroll to read it.
3 To keep the message, press ●. **-or-**

To delete the message, press ⊙ under **Delete**.

To dismiss the message notification:

If the flip is closed, press the Instant Voice button **-or-**

If the flip is open, press ⊙ under **Back** or close the flip.

This icon ✉ appears on the display, reminding you that you have a new message.

Sending a Message From the Message Center

Note: An SMS can only be sent to a phone number, not to an email address an email can only be sent to an email address. not to a phone number.

To send Email or SMS message from the Message Center:

1 From the idle screen press ⊙ below **Msg Cntr.**
2 Press ⊙ below **Create Msg** and select **New Short Message** or **New Email**.
3 Press ●.
4 Press ⊙ under **Lookup**.
5 Select **Contacts** or **Call Log** and scroll to the desired Contact. **-or-**

Enter the phone number or email address via the keypad.

6 Press ● the press ⊙ under Done. The New Message screen now has the phone number you selected entered.
7 Scroll to **Msg** and press ●.
8 Enter the text of the message (see "Entering Text") and press ●.

When you are finished, press ●.

9 If you want to send the message, press ● or press ◌ under **Send**. **-or-**

To change the message, press ◌ under **Change**. **-or-**

If you want to delete the message without sending it, press [MENU] and select **Delete**.

Using Drafts

When you save a message as a draft, it is saved in the drafts folder.

To edit a draft:

1 From the idle screen, press ◌ under **Msg Cntr > Drafts**.
2 Select the draft you want to edit.
3 To edit the fields you want to change, follow step 2 through step 9 in "Sending a Message From the Message Center" on page 32.

Resending Messages

To resend a message:

1 From the idle screen, press ◌ under **Msg Cntr > Outbox**.
2 Scroll to the message you want to resend. **-or-**

Press the number of the message you want to resend.

3 Press [!]. **-or-**

Press [MENU]. Select **Resend**.

Deleting Sent Messages

To delete a sent message:

1 From the idle screen, press ◌ under **Msg Cntr > Outbox**.
2 Scroll to the message you want to delete.
3 Press ◌ under **Delete**.
4 Press ◌ under **Yes** to confirm.

To delete all unlocked sent messages:

1 From the idle screen, press ◌ under **Msg Cntr > Outbox**.
2 Press [MENU].
3 Select **Delete All**.
4 Press ◌ under **Yes** to confirm.

Browser Messages

Note: This feature may not be offered by your service provider.

Browser Messages are notifications that you have a SMS messages sent from:

33

Message Center

- Another phone
- Your service provider's website
- Any email application

When you receive a Browser Message, a notification appears on the display.

If you dismiss the notification, this icon ✉ appears on the display, reminding you that you have a new message.

Personal Information and Phone Management

Call Log

The Call Log stores the numbers of the 25 most recent calls you have made and received.

If the number of a recent call is stored in Contacts, the name associated with the number appears on the Call Log list.

An icon appears beside the name or number indicating the Contacts type of the number used in the call.

For phone calls, an icon appears to the left of the name or number giving more information about the call:

- ℚ⇨ A call you made.

- ⇨ℚ A call you received.

- ℚ☻ A missed call. Missed calls appear on the recent calls list only if you have Caller ID.

Note: The Call Log also stores call alerts you have received. They appear as Instant Voice calls. Call alerts remain in your Call Log until you delete them or until they reach the end of the list.

Viewing Call Log

With the Flip Open

1 From the idle screen, select **Call Log**.

2 Scroll through the list.

To get more information on a recent call:

Select a call from the Call Log.

Information such as the name associated with the call, the number, the date, time, and duration of the call displays.

If a new dialed or received call to a call log is a duplicate, the old entry is deleted. Duplicates for missed calls are retained.

To Return a Call From the Call Log

To return a call from the call log, highlight the desired entry and press ℚ. If there are more than 1 number associated with the entry you can use the navigation dial to scroll to the desired number type.

Viewing Date and Time and Other Call Details

To view the date and time a call was received and other call related details (such as duration, name, number type):

1 From the idle screen, press ⓘ, or select **Call Log**.

2 Highlight the desired entry.

3 Press ● for details.

Missed Phone Calls

When you miss a call, this icon ℓ☺ and the number of phone calls you have missed appear briefly.

With the Flip Open

If you want to dismiss the missed call message, press ☉ under **Exit**. **-or-**

If you want to view the missed call on the call log list, press ●.

With the Flip Closed

If you want to dismiss the missed call message, press the Instant Voice button.

Deleting Entries

To delete a call:

1 From the Call Log, scroll to the call you want to delete.

2 Press \MENU/ under **Remove**.

3 Press ● or press ☉ under **Yes** to confirm.

To delete all calls:

1 From the Call Log, press \MENU/.

2 Select **Clear Log**.

3 Press ● or press ☉ under **Yes** to confirm.

Storing Calls From the Call Log to Contacts

1 From the Call Log, scroll to the number you want to store.

2 Press ☉ under **Store**. **-or-**

Tip: If **Store** is not on this menu, the number is already stored in Contacts.

3 To store the number as a new entry, select **[New Entry]**. **-or-**

To store the number to an existing entry, select the entry.

4 With the Contacts type field highlighted, scroll left or right to display the Contacts type you want to

assign the number. For information on Contacts types, see page 39.

5 If you want to add more information to the entry, follow the applicable instructions in "Creating a Contacts Entry" on page 39.

6 Press ⊙ under **Save**.

Contacts

Each Contacts entry can store several numbers or addresses. The number entries stored depends on the size of the contact entry.

Information stored in Contacts is saved on your phone and can be copied to the SIM card.

A Contacts entry contains:

• **Name** (first name/last name)— A name is required if your are storing more than one number or address to the entry; otherwise, it is optional. Typically, this is the name of the person whose contacts information is stored in the entry.

• **Email** — You can enter an Email address for the contact entry.

• **Instant Voice ID** — You can store the instant voice ID for the contact entry.

• **Enterprise Ext**. — You can store an Enterprise Ext. number for use with the WLAN network for the contact entry.

• **No.** — You can store the phone number of the contact entry for each of the entry's Contacts Types (Mobile, Work, Home, and Other).

• **Contacts type** — Each number or address stored must be assigned a Contacts type.

• **Speed #** — You can assign a different Speed dial number (1-1000) to the contact entry for each of the entry's Contacts types (Mobile, Work, Home, and Other).

• **Ringer ID** — You can assign a different ringer ID to each contact entry for each of the entry's Contacts types (Mobile, Work, Home, and Other). This is the sound or vibration your phone makes when you receive phone calls or call alerts from any of the numbers stored in the entry.

🕭	**Mobile**	phone number
🕭	**Work**	phone number
☏	**Home**	phone number
☏	**Other**	phone number
✉	**Email**	email address
	Instant Voice ID	instant voice call
	Enterprise Ext.	WLAN phone extension
	Speed #	speed dial numbers (can be assigned to mobile, work, home, and other phone numbers)

Note: You can store numbers up to 64 digits long, but every 20 digits must be separated by a pause or wait. See "Creating Pauses, Waits and Insert "n" Function" on page 17.

- **Voice tag** — If you create a voice tag for a number, you can then dial that number by saying the contacts name into your phone. This icon appears ℘ to the left of the Contacts type icon if a voice tag is assigned.

Viewing Contacts

To access Contacts:

From the Idle screen, select **Contacts** and press ●.

To view entries:

1 From the Contacts list, scroll to the entry you want to view.

2 If an entry has more than one number or address stored, ◀ ▶ surrounds the Contacts type icon. Scroll left or right to view the icon for each number stored in the entry.

3 With the desired icon showing, press ● to view the entry.

4 Scroll to view the other numbers and addresses stored for the entry.

Tip: To view more entries, continue scrolling.

Sort Contacts

To sort the Contacts:

1 From the Contacts list, press MENU.

2 Scroll to **Setup**.

3 Press ●.

4 In Sort By, select **First Name**, **Last Name**, or **Speed No**.

Creating a Contacts Entry

A number or address and a Contacts type are required for all Contacts entries. Other information is optional. You may enter the information in any order by scrolling through the entry form.

To create a Contacts entry:

1 From the Idle screen, select **Contacts** and press ●.

2 Select **Contacts > [New Entry]** and press ●.

3 Press ꜀ᴍᴇɴᴜ꜀ to select a text entry method and press ●.

4 Enter the first/last name of the contact.

To backspace a character press ◌ under **Delete**.

5 If you want to store the entry's Email address, scroll to **Email** enter the address.

6 If you want to store the entry's Instant Voice ID, scroll to **Instant Voice ID** enter the ID.

7 To store the entry's enterprise extension, scroll to **Enterprise Ext.** enter the extension.

   Note: The enterprise extension should only be used on your campus and not other campuses or companies.

8 To store the entry's phone number, scroll to **No.** and enter the phone number.

Enter the number. For phone numbers, use the 10-digit format. For email addresses, see "Entering Text".

9 To assign a contacts type of the number being stored, scroll to **Type** and use the left/right segments of the navigation dial to select the type (Work, Home, Mobile, or Other).

10 To assign a speed dial number, number being stored, scroll to **Speed #** and the next available number can be assigned or you can enter the desired speed dial number 1-1000) if it is available.

11 If you want to assign a ring ID to the entry, scroll to **Ringer ID** and use the left/right segments of the navigation dial to select the desire ringer ID.

You can continue entering more numbers for different Contacts Type (Work, Home, Mobile, or Other) for this entry.

12 When you are finished entering all the information needed for this entry, press ◌ under **Save.**

Voice Tags

1 If you want to create a voice tag for a phone number, select **Voice Tag**.

As directed by the screen prompts, say and repeat the name you want to assign to the number. Speak clearly into the microphone.

2 When you are finished, press ⬮ under **Back**.

Storing Numbers

To store numbers to Contacts from the Call Log:

1 From the idle screen select Call Log.
2 Scroll to the desired Call Log number and press ⬮ under **Store**.
3 Enter the appropriate information as you would for creating a new entry (see "Creating a New Entry"). The number from the Call Log will already be entered.
4 When you are finished press ⬮ under **Save**.

To store numbers to Contacts from the idle screen:

1 Use the keypad to enter the number you want to store.
2 Press Ɱᴇɴᴜ.
3 Select **Store**.
4 Enter the appropriate information as you would for creating a new entry (see "Creating a New Entry"). The number you entered from the idle screen will already be entered.
5 When you are finished press ⬮ under **Save**.

Copying Contacts Numbers to Your SIM Card

Contacts entries are stored to your phone. To stored Contacts numbers to your phones SIM card:

1 From the Contacts list, scroll the desired entry and press Ɱᴇɴᴜ.
2 Select **Copy to SIM**.

Press ● then press ⬮ under **Save**.

Editing Contacts Entries

1 From the Contacts list, scroll to the entry you want to edit.
2 Press Ɱᴇɴᴜ.
3 Select **Edit**.
4 Follow the applicable instructions in "Creating a Contacts Entry" on page 39 to edit the various fields.

Deleting an Entry

1 From the Contacts list, scroll to the entry you want to delete.
2 Press Ɱᴇɴᴜ.
3 Select **Delete Contact**.
4 Press ● then press ⬮ under **Yes** to confirm.

Checking Capacity

To see how many contact numbers are stored in Contacts:

1 From the Contacts list, press `MENU`.

2 Select **Phone Capacity**.

3 Press ●.

The phone memory has a dedicated area for Contacts information. Contacts are stored in this area until it is full. If you synchronize your Contacts information with your computer, additional phone memory is used depending on the details associated with each contact.

Calendar

Calendar stores events based on available memory. You can store events over a 13 month period — 12 months after and 1 month before the current date.

A Calendar event contains:

- A subject — A name you assign to the event. You can also enter a phone number, or Instant Voice ID.
- A start time — The start time automatically assigned to an event is the beginning of the day. You can change the start time, or assign no start time, before storing the event.

- A duration — the length of time the event lasts
- A date — The date automatically assigned to an event is the date that was highlighted or selected when you began creating the event. You can change this date before storing the event.
- A recurrence — lets you store the event as a recurring event.
- A reminder — If an event has a start time, you can set Calendar to remind you that the event is going to start.
  - A ring tone for the reminder

Only the subject and date are required.

- Scheduled event indicator — When the event has been stored, a triangle is displayed in the lower right of the event day on the calendar.

Viewing Calendar

To access Calendar:

From the idle screen, select **Calendar**.

You can view Calendar by the day and month, via the Idle screen.

To scroll from month to month press `#` and `*`. You can also view the details of any event.

In day view, brief information about each event for that day appears.

In month view, days with events appear with a marker in the corner.

To view an event:

1 Select the day the event occurs.

2 Select the event.

Navigating the Calendar

To scroll through Calendar:

Scroll left, right, up, down or diagonally using the navigation dial.

To highlight a day in month view:

Enter a single digit date using the keypad and that date is highlighted. Entering a second digit within 2 seconds of the first digit and a 2 digit date is highlighted.

For example, enter "1", and the first day of the month is highlighted. Enter "1" and "5" (within 2 seconds) and the 15th of the month is highlighted.

To go to today's date:

1 While viewing Calendar, press $\boxed{\text{MENU}}$.

2 Select **Go To Today**.

Storing Events

Every Calendar event must have a subject and be stored to a date. Other additional information is optional.

You may enter the information in any order by scrolling through the event details.

After you have entered the information you want, you can press ⊙ under **Save** to store the event to Calendar.

If you decide you don't want to store the event:

Press ⊙ under **Exit**.

To create a Calendar event:

1 While viewing Calendar, press ⊙ under **New**.

2 To assign a title to the event:

Select **Title**.

Enter the name. See "Entering Text" on page 33. **-or-**

Press ⊙ under **Lookup** to choose from common event names. **-or-**

Enter a phone number or Instant Voice ID.

When you are finished, press ●.

3 The start time automatically assigned to an event is the beginning of the day. If you want to change the start time or assign no start time:

Select **Start**.

Enter the start time you want.

When you are finished, press ●.

4 If you want to assign a duration to the event:

Select **Duration**.

Select the duration you want. **-or-**

Select **Custom** to enter a duration.

5 The date automatically assigned to an event is the date that was highlighted or selected when you began creating the event. To change the date of the event:

Select **Date**.

Enter the date you want.

6 If you want to make the event a recurring event:

Select **Repeat**.

Select the repeat cycle you want.

Press ⊙ under **Save**.

7 If you want to create reminder for this event.

Select **Reminder**.

Select the reminder time you want. **-or-**

Select **Custom** to enter a reminder time.

Note: If an event has no start time, you can not create a reminder for it.

8 If you have entered all the information you want for this event, press ⊙ under **Save**.

If you want to assign a ring tone, or a profile to the event, see "Ring Tones" on page 50.

Editing Events

To change the details of an event:

1 Select the day the event occurs.

2 Select the event.

3 Press ⊙ under **Edit**.

4 Follow the applicable instructions in "Storing Events" on page 42 to edit the various fields.

To copy an event to another date:

1 Select the day the event occurs.

2 Select the event.

3 Press (MENU).

4 Select **Copy**.

5 Press ⊙ under **Yes** to confirm.

6 Enter the date you want.

7 Press ●.

8 If you want to change more information, follow the applicable instructions in "Storing Events" on page 42 to edit the various fields.

Deleting Events

1 Select the day the event occurs.

2 Select the event.

3 Press MENU.

4 Select **Delete**.

5 If the event is not a recurring event, press ● or press ⚫ under **Yes** to confirm.

If the event is a recurring event:

Select **This Event Only** to delete only the event selected in step 2.

Select **All Occurrences** to delete all occurrences of the event.

Receiving Reminders Alerts

If you created a reminder for a Calendar event, when the reminder time occurs, your phone notifies you with text on the display and a reminder tone.

To view more details about the event:

Open the flip. **-or-**

Press ⚫ under **View**.

To dismiss the reminder:

If the flip is closed, press. **-or-**

If the flip is open, press ●, press ⚫ under **Dismiss,** or close the flip.

Tip: You can set your phone to power on when you receive a reminder. See "Customizing Calendar Setup" on page 44.

For Events with Numbers to Call

If you stored a phone number, or Instant Voice ID in the **Subject** or **Location** field of a Calendar event, you can call or send a call alert to that number from the reminder for that event.

Customizing Calendar Setup

To access Calendar set up options:

1 From the idle, select **Calendar**.

2 Press MENU.

3 Select **Setup**.

You can view or change these options:

• **Start of Day** — sets the beginning of your day. This is the earliest time of day displayed in week view, if you have a 12-hour day view.

• **Delete After** — sets a period of time after which the event is deleted.

Tasks

Tasks allows the user to schedule, prioritize, and organize a list of "To Do's".

To create a task:

1 From the idle screen, select **Tasks**.

2 Select **[New Task]**.

3 Press ●.

4 Enter the appropriate information for your new task.

To view the task later:

1 From the idle screen, select **Tasks**.

2 Select the desired task and press ●.

To delete the task:

1 From the idle screen, select **Tasks**.

2 Press and hold ◌ under **Delete**.

To edit the task:

1 From the idle screen, select **Tasks**.

2 Select the task you want to edit.

3 ◌ under **Edit.**

4 Press ●.

To delete a task:

1 From the idle screen, select **Task**.

2 Select the desired task.

3 Press MENU and select **Delete**.

Task Reminders

See "Assigning Ring Tones" for setting up Task Reminders.

Synchronizing Information

With Microsoft ActiveSync software you can sync your phone's information to your personal computer. Your phone can synchronize with Microsoft Outlook and uses a tethered USB connection. The following items can be synchronized from your phone to your computer:

• Calendar

• Tasks

• Contacts

Shortcuts

Shortcuts lets you access most menu options by pressing a number on your keypad or saying the voice name of the shortcut. Your phone has a preset numbered list of shortcuts.

1 Shortcuts

2 My Info

3 Styles
4 Call Alert (for dispatch calls)
5 Phone Setup
6 In Call Setup
7 Contacts New Entry
8 Calendar New Entry
9 Tasks New Entry
10 Security
11 VPN

Using a Shortcut

If you know the shortcut number:

1 From the idle screen, press ⊙ under **Shortcuts**.
2 On your keypad, press the number assigned to the shortcut.

If you do not know the shortcut number:

1 From the idle screen, press ⊙ under **Shortcuts**.
2 Scroll to the shortcut you want to use.
3 Press ●.

Service Dial Numbers

The Service Dial application is a GSM feature that programs phone numbers of local services into the SIM card for your phone. Even though these service numbers are provided by the GSM cellularservice provider, you can place calls to these services from WLAN environment as well.

To select the Service Numbers from the idle screen:

Scroll to the desired service number and press ⊙ under **CALL**.

Timers and Meters

Timers and Meters measure the duration of your phone calls, Instant Voice, and circuit data use, as well as the number of Kilobytes sent and received by your phone:

- **WLAN Call Timers** — displays 5 options: Last Call, Dialed, Received, All Calls, and Lifetime.
- **Instant Voice Call Timers** — displays 3 options: Last Call, All Calls, and Lifetime.
- **GSM Call Timer**—displays 5 options: Last Call, Dialed, Received, All Calls, and Lifetime.
- **GSM Data Meters**— displays 4 options: GPRS Activity, Sent, Received, and Total.

To view or reset a timer:

1 From the idle, select **Settings**.

2 Select to **Call Timers and Meters**

3 Select the feature you want to view or reset.

4 To view a feature without resetting: Press ● when you are finished viewing. **-or-**

To reset a feature: Press ⭕ under **Reset**. Press ● or press ⭕ under **Yes** to confirm.

Note: The values displayed by Call Timers should not be used for billing. Call timers are estimates only.

Data Access and Data Tools

Internet Browsing

The browser feature lets you access Web pages and Web-based applications on your phone. Contact your service provider to set up access if necessary.

Note: The type of network connection your phone uses depends on your service provider's network. Your network connection charges may vary depending on the type of connection used.

Starting a Browser Session

To access the Web:

1 From the idle screen select **Web**.
2 Scroll to a bookmark, service or application.
3 Press ●.

If you are unable to establish a network connection with the browser, contact your service provider.

Interacting With Web Pages

1 Use the Navigation Dial to scroll through text and highlight selectable items.

2 Press ● to select the highlighted item.
3 Use the Press ● and use the keypad keys to enter information.
4 Press ⊙ under **Back** to go back to the previous page.
5 Press 〔MENU〕 to open the Browser Menu.

Intranet Browsing

NEED INPUT

NET Applications

This feature allows you to run applications that are installed on your phone.

These applications are downloaded from the browser to the "Applications" folder.

To access the NET Applications:

1 From the idle screen select **Apps**.
2 Select **Net Apps > Applications**.
3 Select the desired application from the list.
4 Press ⊙ under **Run**.

Installed applications are preceded by the (?) icon.

An application that has been downloaded but not yet installed is highlighted.

To install a downloaded application:

1 From the idle screen select **Apps**.
2 Select **Net Apps > Applications**.
3 Select the desired (uninstalled) application from the list.
4 Press ⊙ under **Install** or press ●.
5 Press ⊙ under **Exit** to return to the idle screen.

To delete an installed application:

1 From the idle screen select **Apps**.
2 Select **Net Apps > Applications**.
3 Select the desired (installed) application from the list.
4 Press (MENU).
5 Select **Remove**.
6 Press ⊙ under **Yes**.

Speeds

NEED INPUT

GPRS

WLAN

SIM Application Toolkit

The SIM Application Toolkit (GSM only) allows service providers to deliver customized applications through the phone to the customer.

It provides a suite of tools through which the SIM application can control various aspects of the phone such as menus, display information, phone calls, text messages, etc.

Selecting SIM Applications from the Main Menu

To access the SIM Application Toolkit:

1 From the idle screen select **Other**.
2 Select **SIM App Toolkit**.

Phone Settings

Sounds

The Volume menu sets the volume of sounds your phone makes:

- **Earpiece Volume** — sets earpiece volume.
- **Speaker Volume** — sets speaker volume.
- **Style** — sets the ringer style.
- **Ringer Details** — sets the ringer details (see Ring Tones).

Volume

Earpiece and Speaker

1 From the idle screen, select **Settings > Sounds**.

2 Scroll to **Earpiece** to set the earpiece volume. **-or-**

Scroll to **Speaker** to set the speaker volume.

To set the volume:

1 Scroll left or right. **-or-**

2 Press the volume controls.

Ringer

Press the volume controls.

Headset

If you use a headset or similar device with your phone, you can set your phone to send incoming sound to the headset, or the speaker:

1 From the idle screen, select **Settings > Headset Settings**.

2 Select **Auto Answer** (On, Off).

3 Select **Ringer Option** (Headset and Speaker, Speaker Only, Headset Only).

Ring Tones

Setting Ring

To set the ring tone your phone makes when you receive phone calls, message notifications, or call alerts:

1 From the idle screen, select **Settings > Sounds**.

2 Scroll to **Style** and then using the right/left segments on the navigation dial select **Ring**.

3 Scroll to **Ring Details** and press ●. You can set the Ring, Key and Net volume level from 0-7.

Detail settings allow you to specify the ring tone or vibrate pattern.

4 A different ring detail can be set for each of the following:

- **GSM Line 1** — (Silent, Vibe, Ringer 1-12)
- **GSM Line 2** — (Silent, Vibe, Ringer 1-12)
- **WLAN Line** — (Silent, Vibe, Ringer 1-12)
- **Email Messages** — (Silent, Vibe, Ringer 1-12)
- **Text Messages** — (Silent, Vibe, Ringer 1-12)
- **Voice Mail** — (Silent, Vibe, Ringer 1-12)
- **Reminder Alert** — (Silent, Vibe, Ringer 1-12)
- **GSM Roam Calls** — (Silent, Vibe, Ringer 1-12)
- **Notification Beep** — (On/Off, Vibrate)
- **Ringer ID** — (On/Off)
- **Instant Voice Alert** — (Silent, Vibe, Ringer 1-12)
- **Instant Voice Calls** — (Ring, Vibrate, Silent)

    Note: Scrolling to one of the above selections and pressing ● brings up the list of ring detail choices.

    Tip: Highlighting a ring tone lets you hear it.ᵣ

5 When you are finished, press ◌ under **Back**.

Setting Your Phone to Vibrate

You can set your phone to vibrate instead of making a sound when you receive all phone calls, Instant Voice calls, messages notifications, and call alerts.

1 From the idle screen, select **Settings > Sounds**.

2 Scroll to **Style** and select **Vibrate**.

    Vibrate sets your phone to vibrate instead of making a sound.

3 When you are finished, press ◌ under **Back**.

Setting Your Phone to Vibrate and Ring

You can set your phone to vibrate instead of making a sound when you receive all phone calls, Instant Voice calls, messages notifications, and call alerts.

1 From the idle screen, select **Settings > Sounds**.

2 Scroll to **Style** and select **VibeRing**.

    VibeRing vibrates and rings; **Silent** sets your phone to neither vibrate nor make a sound. If Silent is selected then Ring Details are not available

3 When you are finished, press ◌ under **Back**.

Assigning Ring Tones to Contact Entries

You can set the ring tone your phone makes when you receive phone calls or call alerts from someone you have stored in Contacts.

Phone Status

1 From the idle screen, select **Settings > Phone Status**

2 Select **the following**.

- My Tel. Numbers
- Active Line
- Battery Meter
- Other Information

Security

1 From the idle screen, select **Settings > Security.**

2 You can select the following:

- Phone Lock (Select Lock Now, Automatic Lock)
- GSM Call Barring (Select Outgoing Calls, Incoming Calls, or Cancel All)
- SIM PIN (Select On, or Off) "Recommend On"
- New Passwords

Initial Setup

- **Auto Redial** — sets your phone to automatically redial calls that were not completed on the first attempt.
- **Language** — sets the language that your phone displays.

- **DTMF** — sets the DTMF tone duration.

Display/Info Features

The Display/Info menu controls how the keypad and display appear:

From the idle screen, select **Settings > Initial Setup**.

- **Time & Date** — controls whether the time and date appear on the idle screen; sets time and date format; sets year.
- **1 Touch Dial** — controls where the 1 touch dial numbers come from, Phone or SIM.
- **Display** — sets your phone display attributes.
  - **Display Timeout.** — set the display timeout duration (off, 1, 2, 5, 10 minutes).
  - **Backlight** — a backlight lights the display and keypad when you make or receive a call, open or close the flip, or press keys or buttons. **Contrast Int.**— sets the contrast for the internal display (level 0-6).
  - **Contrast Ext.** — sets the contrast for the external display (level 0-6).
- **TTY Setup** — sets TTY (off, TTY, VCO, HCO).
- **Baud Rate** — sets the baud rate (19200, 38400, 57600, 115200).

- **Alert Timeout** — sets the alert timeout (no alert, 20 seconds., 1 minute, 5 minutes, 15 minutes, 30 minutes, 1 hour, continuous).
- **Master Reset** — Reset all options back to their original factory settings, **except** for the unlock code, security code, and lifetime timer.
- **Master Clear** — Master clear **erases all user-downloaded content and user-entered information** stored in your phone's memory, including Contacts and Calendar entries. After you erase the information, you cannot recover it. Master clear does **not** delete any information stored on the SIM card.

Call Settings

- **Call Forward** — sets call forwarding on or off.
- **Incall Setup** — sets answer options (Multi-Key, Open to Answer, Auto Answer).

Call Forwarding

Call forwarding sends calls to the phone numbers you specify. You can forward all calls to one number or forward missed calls to different numbers depending on the reason you missed the call.

Call forwarding is network dependent. There are separate call forwarding settings for WLAN and GSM.

CAUTION: Changing the call forwarding settings overrides the macromobility and may disrupt the seamless operation of your phone.

Forwarding All Calls

When you set your phone to forward all calls, an icon appears (one for WLAN and a different one for GSM) in the top row of the display. To forward all calls:

1 From the idle screen, select **Settings > Call Settings> Call Forward**.
2 Press ⊙ under **Status** to retrieve the current status from the GSM network and update all values.
   In WLAN environment the status option is not available because the WLAN call forwarding status is automatically updated by the system.
3 Select **All Calls**.

   If you specified a forwarding number for all calls before, this number displays.

   To forward calls to this number, press ●.

   To delete this number, then press and hold ⊙ under **Delete**.

4 To enter the number you want to forward calls to:

   Enter the number using your keypad. **-or-**

Press ⊙ under **Lookup**. Select **Contacts**, or **Call Log**. Select the number you want the calls forwarded to.

5 Press ●.

All your calls are now forwarded to the number you specified.

Turning Off Call Forwarding

If you don't want all your calls forwarded, turn the feature off:

1 From the idle screen, select **Settings > Call Settings > Call Forward**.

2 Select **Off**.

Forwarding Missed Calls

You can specify a forwarding number for each type of missed call:

- **If Busy, Forward To** — Your phone is on a call or transferring data.
- **If No Answer, Fwd To** — You do not answer on the first 4 rings.
- **If Unreachable, Fwd To** — Your phone is out of coverage or powered off.

Note: If you want a type of missed call sent to voice mail, the call forwarding number for that type of missed call must be your voice mail access number.

To forward missed calls:

1 From the idle screen, select **Settings > Call Settings > Call Forward > Detailed**.

2 Select **If Busy** to specify a forwarding number for calls received when your phone is busy.

3 If you specified a forwarding number for this type of call before, this number displays.

To forward calls to this number, press ⊙ under **Exit** and go to step 6. **-or-**

To delete this number, press ●, then press and hold ⊙ under **Delete**.

4 To enter the number you want to forward this type of call to:

Enter the number using your keypad. **-or-**

Press ⊙ under **Lookup**. Select **Contacts**, or **Call Log**. Select the number you want to enter.

5 Press ●.

6 Repeat step 2 through step 5 for **If No Answer** and **If Unreachable**.

7 When you are finished, press ⊙ under **Back**.

Viewing Call Forwarding Settings

1 From the idle screen, select **Settings > Call Settings > Call Forward > Detailed**.

2 This shows you the forwarding numbers you had previously setup.

• **Busy, Forward To** — Your phone is on a call or transferring data.

• **If No Answer, Fwd To** — You do not answer on the first 4 rings.

• **If Unreachable, Fwd To** — Your phone is out of coverage or powered off.

In-Call Setup

Answer Options

1 From the idle screen, select **Settings > Call Settings > In-Call Setup > Answer Options**.

2 Scroll to **Multi-Key** and select "On" or "Off" (press any key to answer a call).

3 Scroll to **Open to Answer** and select "On" or "Off" (opening the flip answers the call).

4 Scroll to **Auto Answer** and select "On" or "Off" (call is automatically answered when the phone rings).

Using a Remote Instant Voice Button

If you are using a headset or other accessory with a remote Instant Voice button, you can use the remote Instant Voice button for Instant Voice calls.

For Instant Voice calls, use the remote Instant Voice button as you would the Instant Voice button on your phone.

Network Settings

Network Settings allows you to change the settings for the GSM and WLAN network features of your phone.

Accessing Network

To access the Network Settings:

From the idle screen select **Settings > Network Settings**.

WLAN/GSM Mode Setting

Used to select the network in which you want your phone operate.

• WLAN Preferred - If your phone detects both WLAN and GSM cellular networks, it selects WLAN.

• GSM Only - Your phone operates only on the GSM network.

Tip: If you know you are not going to be in a WLAN environment, you may want to set this setting to "GSM Only". This eliminates the WLAN network search, extending battery life.

GSM Settings

This allows you to set up your GSM cellular network parameters.

WLAN Settings

This allows you to set up your WLAN network parameters.

Setting Service Tone

If this feature is set to "On" a tone is emitted when the GSM network status changes, if it is set to "Off" no tone is heard.

Setting Call Drop Tone

If this feature is set to "On" a tone is emitted if a call is dropped, if it is set to "Off" no tone is heard.

Accessory Support

To order additional accessories, log on to our Web site at www.motorola.com/store/? or contact your Motorola Authorized Retailer.

For More Information

If you have questions about your CN620 phone, contact your sales representative or your service provider.

Phone Security

Passwords

Passwords and codes associated with your phone are as follows:

- Unlock Code
- Security Code
- SIM PIN
- SIM PIN2
- Barring Password

Barring Password

The Barring password allows you to bar incoming and/or outgoing GSM calls.

To change this setting:

1 From the idle screen select **Settings > Security > GSM Call Barring.**

2 Select **Outgoing** and/or **Incoming**.

3 Select "On" or "Off".

To change this code:

1 From the idle screen select **Settings > Security > New Passwords.**

2 Select **Change Barring Password**.

3 Enter the **Old Barring Password**.

4 Enter the **New Barring Password**.

5 Enter the new barring code again to confirm.

Virtual Private Network (VPN)

Your Motorola CN620 comes pre-loaded with movianVPN™ Certicom. movianVPN™ secures your wireless connections and extends your enterprise security policy to your Motorola CN620 phone. Based on the IPSec standard, movianVPN™ offers connectivity with leading VPN gateways, providing a cost-effective solution that integrates quickly with your existing VPN infrastructure. A FIPS 140-2 certified version is available. You can use movianVPN™ free for 30 days.

For more information about purchasing a license to continue using movianVPN™ on your Motorola CN620 phone, visit the Certicom website at www.certicom.com.

VPN establishes a secure tunnel through a public GPRS. This is accomplished by effectively attaching the device to the Enterprise network by encrypting data packets sent over the air.

To access VPN:

From the idle screen select **Apps > VPN**.

Login Sequence

1 At the VPN Client screen, enter your user name and passcode. Your passcode characters display as asterisks (*****).
2 Press ⊙ under **Connect**.

Before launching data applications such as the browser or email, you need to connect VPN to the corporate network. Once connected, VPN runs in the background and displays the VPN icon in the status bar.

Logoff Sequence

To logoff from VPN, press ⊙ under **Logoff**.

Creating a New VPN Policy

1 From the idle screen select **Apps > VPN.**
2 Press ͞ᴹᴱᴺᵁ͟.
3 Scroll to **Policies**.
4 Press ●.
5 Select **New**.
6 Press ●.
7 Enter a name for the new policy (a default name such as "Policy #" is provided).
8 Adjust Network Settings, Crypto Suite, and Gateway Settings by choosing from the list.
9 Press ●.

10 To save your settings, press ⊙ under **Save**.
11 Press ⊙ under **Done**.

Deleting a VPN Policy

1 From the idle screen select **Apps > VPN.**
2 Press ͞ᴹᴱᴺᵁ͟.
3 Scroll to **Policies.**
4 Press ●.
5 Select the policy to be deleted, then press ͞ᴹᴱᴺᵁ͟.
6 Select **Delete** from the menu, then press ●.
7 To confirm the policy deletion, press ⊙ under **Yes**.
8 Press ⊙ under **Back** to return to the VPN login screen.

SIM PIN

SIM PIN/SIM PIN2 Code

Your *Personal Identification Number* (PIN) code protects the information stored on your SIM card. When the SIM card is locked, you must enter your SIM card PIN code to unlock the SIM card each time you turn on the phone or insert the SIM card in the phone. Your SIM card PIN code is given to you by your service provide.

Changing Your SIM PIN

To change this code:

1 From the idle screen select **Settings > Security > New Passwords.**

2 Select **Change SIM PIN**.

3 Enter the **Old SIM PIN**.

4 Enter the **New SIM PIN**.

5 Enter the new SIM PIN again to confirm.

Security Code

The phone's 6-digit security code is originally set to 000000. To change this code:

1 From the idle screen, select **Settings > Security > New Passwords.**

2 Select **Change Security Code**.

3 Enter the **Old Security Code**.

4 Enter the **New Security Code**.

5 Enter the new security code again to confirm.

Turning PIN Requirement On and Off

Note: The SIM card determines whether the PIN requirement can be turned on or off. If your SIM does not allow this, this option is removed from the securities settings option list.

When the SIM PIN requirement is on, you are prompted to enter your PIN each time you turn on your phone.

Note: If a SIM PIN is required, your phone will not function until the SIM PIN is entered, except for making emergency calls.

When the PIN requirement is off, your phone can be used without entering a PIN.

Important: When the SIM PIN requirement is off, the personal data on your SIM card is not protected. Anyone can use your phone and access your personal data.

1 From the idle screen, select **Settings > Security > SIM PIN**.

2 Select **On** or **Off**.

3 Enter the current SIM PIN.

4 Press ●.

Unblocking the SIM Card PIN Code

If you enter an incorrect SIM card PIN code 3 times in a row, your SIM card is disabled and your phone displays **SIM Blocked**. You must enter a PIN unblocking key (PUK) code, which you can obtain from your service provider.

If the unblocking attempt is tried unsuccessfully 10 times, the SIM card is permanently disabled and your phone displays **SIM Disabled**.

SIM Lock

Your *Personal Identification Number* (PIN) code protects the information stored on your SIM card. When the SIM card is locked, you must enter your SIM card PIN code to unlock the SIM card each time you turn on the phone or insert the SIM card in the phone.Your SIM card PIN code is given to you by your service provide.

1 From the idle screen select **Settings > Security > SIM PIN.**
2 Select "On" or "Off".

Phone Lock

The phone's 4-digit unlock code is originally set to 1234.

Note: It is recommended that you change the phone lock and SIM codes from the default values. This is critical to protect your personal and corporate data.

To change this code:

1 From the idle screen select **Settings > Security > New Passwords.**

2 Select **Change Unlock Code**.
3 Enter the **Old Unlock Code**.
4 Enter the **New Unlock Code**.
5 Enter the new unlock code again to confirm.

You can set phone Lock Now or to Automatic Lock.

To change this setting:

1 From the idle screen select **Settings > Security > Phone Lock.**
2 Select **Lock Now** or **Automatic Lock**.

Note: It is recommended that you set you phone to automatic lock so that your phone powers up in the locked mode.

Authentication

NEED INPUT

Encryption

NEED INPUT

Understanding Status Messages

You may receive status messages under certain conditions. Before contacting Customer Care, note the message, numeric code, and the conditions under which it appeared. The following table lists and describes the status messages.

Note: When your phone cover is closed, the one-line display screen shows a shortened version of the status messages displayed in the full-sized screen. To see complete status messages, open the phone cover.

Status Messages (one-line display)	Status Messages (full-sized display)	Message Description
Number Not in Service	**Number Not in Service**	The number that you entered is not valid.
Not Avail.	**User Not Available**	The phone that you called is either busy, out of coverage, or turned off. Please try again later.

Status Messages (one-line display)	Status Messages (full-sized display)	Message Description
Not Avail.	**User Not Authorized**	The person that you called has not purchased this service.
Failed	**Please Try Later**	This service is temporarily not available. Please try again later.
Restricted	**Service Restricted**	This service was restricted by your service provider, or this service was not purchased.
Not Avail.	**Service Not Available**	You are either out of coverage or having problems with provisioning.
System Busy	**System Busy**	The system is experiencing heavy traffic. Please try again later.
Failed	**Service Conflict**	This service cannot be enabled because an incompatible service has already been turned on.
Try Again	**Please Try Again**	An error occurred. Please try again.

Understanding Status Messages

Status Messages (one-line display)	Status Messages (full-sized display)	Message Description
	Wrong PIN	You have entered an incorrect PIN number.
	Please Enter Special Code	You have inserted a SIM card that will not work with a your service provider phone. Contact Customer Care if you believe this is a valid SIM card.
Self Check	**Self Check Error + Number Code**	A fault was detected with your phone. If this error recurs, note the error code and contact Customer Care.
Self Check	**Self Check Fail + Number Code**	An operational fault was detected with your phone. Note the numeric code, turn your phone off, and contact Customer Care.

Status Messages (one-line display)	Status Messages (full-sized display)	Message Description
PIN Blocked	**PIN Blocked Call Your Provider**	The incorrect PIN was entered 3 consecutive times. You will be unable to place or receive calls on your phone. Contact Customer Care to have them obtain the PIN Unblocking Key (PUK) code.
Insert SIM	**Insert SIM**	Your SIM card is not being detected. Please check to ensure that you have inserted the SIM card correctly into your phone.
Enter PIN	**Enter SIM PIN**	Please enter your 4- to 8-digit SIM PIN code.
Unit Lock	**Enter Unlock Code**	Auto Phone Lock is activated. Enter your unlock code.
Low Memory	**New Browser Message Memory Full!**	Warns of low memory for Net Alerts.
	Scanning for Satellites	Searching for GPS satellites.

Safety and General Information

IMPORTANT INFORMATION ON SAFE AND EFFICIENT OPERATION.

READ THIS INFORMATION BEFORE USING YOUR INTEGRATED MULTI-SERVICE PORTABLE RADIO.

RF Operational Characteristics

Your radio product contains a radio frequency transmitter to convey the information you wish to send as well as occasional automatic signals used to sustain connection to the wireless network, and a receiver which enables you to receive communication and connection information from the network.

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

Portable Radio Product Operation and EME Exposure

Your Motorola radio product is designed to comply with the following national and international standards and guidelines regarding exposure of human beings to radio frequency electromagnetic energy (EME):

- United States Federal Communications Commission, Code of Federal Regulations; 47 CFR part 2 sub-part J.
- American National Standards Institute (ANSI) / Institute of Electrical and Electronics Engineers (IEEE). C95. 1-1992.
- Institute of Electrical and Electronics Engineers (IEEE). C95. 1-1999 Edition.
- International Commission on Non-Ionizing Radiation Protection (ICNIRP) 1998.
- Ministry of Health (Canada), Safety code 6. Limits of Human Exposure to Radiofrequency Electromagnetic Fields in the Frequency Range from 3 kHz to 300 GHz, 1999.
- Australian Communications Authority Radiocommunications (Electromagnetic Radiation - Human Exposure) Standard 2003.

• ANATEL, Brasil Regulatory Authority, Resolution 256 (April 11, 2001) "additional requirements for SMR, cellular and PCS product certification.

To assure optimal radio product performance and make sure human exposure to radio frequency electromagnetic energy is within the guidelines set forth in the above standards, always adhere to the following procedures:

Phone Operation

When placing or receiving a phone call, hold your radio product as you would a wireline telephone. **Speak directly into the microphone**.

Two-way radio operation

When using your radio product as a traditional two-way radio, **hold the radio product in a vertical position with the microphone one to two inches (2.5 to 5 cm) away from the lips**.

Body-worn operation

To maintain compliance with FCC RF exposure guidelines, if you wear a radio product on your body when transmitting, always place the radio product in **a Motorola approved clip, holder, holster, case or body harness for this product**. Use of non-Motorola-approved accessories may exceed

FCC RF exposure guidelines. **If you do not use a Motorola approved body-worn accessory and are not using the radio product in the intended use positions along side the head in the phone mode or in front of the face in the two-way radio mode, then ensure the antenna and the radio product are kept the following minimum distances from the body when transmitting**

• **Phone or Two-way radio mode: one inch (2.5 cm)**
• **Data operation using any data feature with or without an accessory cable: one inch (2.5 cm)**

Antenna Care

Use only the supplied or an approved replacement antenna. Unauthorized antennas, modifications, or attachments could damage the radio product and may violate FCC regulations.

DO NOT hold the antenna when the radio product is "IN USE". Holding the antenna affects call quality and may cause the radio product to operate at a higher power level than needed.

Approved Accessories

For a list of approved Motorola accessories call 1-800-453-0920.

ALL MODELS WITH FCC ID AZ489FT5829 MEET THE GOVERNMENT'S REQUIREMENTS FOR EXPOSURE TO RADIO WAVES.

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

The exposure standard for wireless mobile phones employs a unit of measurement known as the Specific Absorption Rate, or SAR. The SAR limit set by the FCC is 1.6 W/kg.[1] Tests for SAR are conducted using standard operating positions reviewed by the FCC with the phone transmitting at its highest certified power level in all tested frequency bands. Although the SAR is determined at the highest certified power level, the actual SAR level of the phone while operating can be well below the maximum value. This is because the phone is designed to operate at multiple power levels so as to use only the power required to reach the network. In general, the closer you are to a wireless base station antenna, the lower the power output.

Before a phone model is available for sale to the public, it must be tested and certified to the FCC that is does not exceed the limit established by the government-adopted requirement for safe exposure. The tests are performed in positions and locations (e.g., at the ear and worn on the body) as required by the FCC for each model. The highest SAR value for this model phone when tested for use at the ear is 1.49 W/kg and when tested on the body, as described in this user guide, is 1.37 W/kg during packet data transmission. (Body-worn measurements differ among phone models, depending upon available accessories and FCC requirements.)[2]

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

The FCC has granted an Equipment Authorization for this model phone with all reported SAR levels evaluated as in compliance with the FCC RF exposure guidelines. SAR information on this model phone is on file with the FCC and can be found under the Display Grant section of http://www.fcc.gov/oet/fccid after searching on FCC ID AZ489FT5829.

Additional information on Specific Absorption Rates (SAR) can be found on the Cellular Telecommunications Industry Association (CTIA) website at http://www.wow-com.com.

[1] In the United States and Canada, the SAR limit for mobile phones used by the public is 1.6 watts/kg (W/kg) averaged over one gram of tissue. The standard incorporates a substantial margin of safety to give additional protection for the public and to account for any variations in measurements.

[2] The SAR information reported to the FCC includes the FCC-accepted Motorola testing protocol, assessment procedure, and measurement uncertainty range for this product.

Electromagnetic Interference/Compatibility

Note: Nearly every electronic device is susceptible to electromagnetic interference (EMI) if inadequately shielded, designed or otherwise configured for electromagnetic compatibility.

Facilities

To avoid electromagnetic interference and/or compatibility conflicts, turn off your radio product in any facility where posted notices instruct you to do so. Hospitals or health care facilities may be using equipment that is sensitive to external RF energy.

Aircraft

When instructed to do so, turn off your radio product when on board an aircraft. Any use of a radio product must be in accordance with applicable regulations per airline crew instructions.

Medical Devices

Pacemakers

The Advanced Medical Technology Association (AdvaMed) recommends that a minimum separation of 6 inches (15 cm) be maintained between a handheld wireless radio product and a pacemaker. These recommendations are consistent with those of the U.S. Food and Drug Administration.

Persons with pacemakers should:

• ALWAYS keep the radio product more than 6 inches (15 cm) from their pacemaker when the radio product is turned ON.

• Not carry the radio product in a breast pocket.

• Use the ear opposite the pacemaker to minimize the potential for interference.

• Turn the radio product OFF immediately if you have any reason to suspect that interference is taking place.

Hearing Aids

Some digital wireless radio products may interfere with some hearing aids. In the event of such interference, you may want to consult your hearing aid manufacturer to discuss alternatives.

Other Medical Devices

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

Use While Driving

Check the laws and regulations on the use of radio products in the area where you drive. Always obey them.

When using the radio product while driving, please:

- Give full attention to driving and to the road.
- Use hands-free operation, if available.
- Pull off the road and park before making or answering a call if driving conditions so require.

Operational Warnings

For Vehicles with an Air Bag

Do not place a portable radio product in the area over the air bag or in the air bag deployment area. Air bags inflate with great force. If a portable radio is placed in the air bag deployment area and the air bag inflates, the radio product may be propelled with great force and cause serious injury to occupants of the vehicle.

Potentially Explosive Atmospheres

Turn off your radio product prior to entering any area with a potentially explosive atmosphere, unless it is a radio product type especially qualified for use in such areas as "Intrinsically Safe" (for example, Factory Mutual, CSA, or UL approved). Do not remove, install, or charge batteries in such areas. Sparks in a potentially explosive atmosphere can cause an explosion or fire resulting in bodily injury or even death.

> **Note: The areas with potentially explosive atmospheres referred to above include fueling areas such as below decks on boats, fuel or chemical transfer or storage facilities, areas where the air contains chemicals or particles, such as grain, dust or metal powders, and any**

other area where you would normally be advised to turn off your vehicle engine. Areas with potentially explosive atmospheres are often but not always posted.

Blasting Caps and Areas

To avoid possible interference with blasting operations, turn off your radio product when you are near electrical blasting caps, in a blasting area, or in areas posted: "Turn off two-way radio". Obey all signs and instructions.

Operational Cautions

Batteries

All batteries can cause property damage and/or bodily injury, such as burns if a conductive material such as jewelry, keys, or beaded chains touches exposed terminals. The conductive material may complete an electrical circuit (short circuit) and become quite hot. Exercise care in handling any charged battery, particularly when placing it inside a pocket, purse, or other container with metal objects. To reduce the risk of injury, batteries should not be exposed to fire, disassembled, or crushed

Cleaning and Drying Considerations

This product is not water proof, and exposing the unit to liquids may result in permanent damage to the unit.

If your radio product interior gets wet, then do not try to accelerate drying with the use of an oven or a dryer as this will damage the radio product and void the warranty. Instead, do the following:

1 Immediately power off the radio product.
2 Remove Battery and SIM card (if so equipped) from radio product.
3 Shake excess liquid from radio product.
4 Place the radio product and battery in an area that is at room temperature and has good air flow.
5 Let the radio product, battery, and SIM card dry for 72 hours before reconnecting the battery and/or powering on the radio product.

If the radio product does not work after following the steps listed above, contact your dealer for servicing information.

Clean the external surfaces of the radio product with a damp cloth, using a mild solution of dishwashing detergent and water. Some household cleaners may contain chemicals that could seriously damage the radio product. Avoid the use of any petroleum-based solvent cleaners. Also, avoid applying liquids directly on the radio product.

Accessory Safety Information

Important: Save these accessory safety instructions.

• Before using any battery or battery charger, read all the instructions for and cautionary markings on (1) the battery, (2) the battery charger, which may include a separate wall-mounted power supply or transformer, and (3) the radio product using the battery.

• Do not expose any battery charger to water, rain, or snow as they are designed for indoor or in-vehicle use only.

Warning: To reduce the risk of injury, charge only the rechargeable batteries described in "Battery" on page 3 through page 5. Other types of batteries may burst, causing personal injury and damage.

• To reduce the risk of damage to the cord or plug, pull by the plug rather than the cord when you disconnect the battery charger from the power source outlet.

• Do not operate any battery charger with a damaged cord or plug — replace them immediately.

• Battery chargers may become warm during operation, but not hot. If it becomes hot to the touch, unplug it from the power outlet immediately and discontinue its use.

• Use of a non-recommended attachment to a battery charger may result in a risk of fire, electric shock, or injury to persons.

• Make sure the battery charger power cord is located so that it will not be stepped on, tripped over, or subjected to damage or stress.

• An extension cord should not be used with any battery charger unless absolutely necessary. Use of an improper extension cord could result in a risk of fire and electric shock. If an extension cord must be used, make sure that:

   • The pins on the plug of the extension cord are the same number, size, and shape as those on the plug of the charger.

   • The extension cord is properly wired and in good electrical condition.

- The cord size is 18AWG for lengths up to 100 feet and 16AWG for lengths up to 150 feet.
- Do not operate any battery charger if it has received a sharp blow, has been dropped, or has been damaged in any way; take it to a qualified service technician.
- Do not disassemble a battery charger; take it to a qualified service technician when service or repair is required. Incorrect reassembly may result in a risk of electric shock or fire.
- Maximum ambient temperature around the power supply or transformer of any battery charger should not exceed 40°C (104°F).
- The output power from the power supply or transformer must not exceed the rating given on the Desktop Dual-Pocket Charger.
- The disconnection from the line voltage is made by unplugging the power supply from the AC receptacle.
- To reduce risk of electric shock, unplug any battery charger from the outlet before attempting any maintenance or cleaning.

For optimum charging performance, turn off the radio product while charging it in any battery charger.

The U.S. Food and Drug Administration's Center for Devices and Radiological Health Consumer Update on Mobile Phones

FDA has been receiving inquiries about the safety of mobile phones, including cellular phones and PCS phones. The following summarizes what is known — and what remains unknown — about whether these products can pose a hazard to health, and what can be done to minimize any potential risk. This information may be used to respond to questions.

Why the concern?

Mobile phones emit low levels of radiofrequency energy (i.e., radiofrequency radiation) in the microwave range while being used. They also emit very low levels of radiofrequency energy (RF), considered non-significant, when in the stand-by mode. It is well known that high levels of RF can produce biological damage through heating effects (this is how your microwave oven is able to cook food). However, it is not known whether, to what extent, or through what mechanism, lower levels of RF might cause adverse health effects as well. Although some research has been done to address these questions, no clear picture of the biological effects of this type of radiation has emerged to date. Thus, the available science does not allow us to conclude that mobile phones are absolutely safe, or that they are unsafe. However, the available scientific evidence *does not* demonstrate any adverse health effects associated with the use of mobile phones.

What kinds of phones are in question?

Questions have been raised about hand-held mobile phones, the kind that have a built-in antenna that is positioned close to the user's head during normal telephone conversation. These types of mobile phones are of concern because of the short distance between the phone's antenna — the primary source of the RF — and the person's head. The exposure to RF from mobile phones in which the antenna is located at greater distances from the user (on the outside of a car, for example) is drastically lower than that from hand-held phones, because a person's RF exposure decreases rapidly with distance from the source. The safety of so-called "cordless phones,"

which have a base unit connected to the telephone wiring in a house and which operate at far lower power levels and frequencies, has not been questioned.

How much evidence is there that hand-held mobile phones might be harmful?

Briefly, there is not enough evidence to know for sure, either way; however, research efforts are on-going. The existing scientific evidence is conflicting and many of the studies that have been done to date have suffered from flaws in their research methods. Animal experiments investigating the effects of RF exposures characteristic of mobile phones have yielded conflicting results. A few animal studies, however, have suggested that low levels of RF could accelerate the development of cancer in laboratory animals. In one study, mice genetically altered to be predisposed to developing one type of cancer developed more than twice as many such cancers when they were exposed to RF energy compared to controls. There is much uncertainty among scientists about whether results obtained from animal studies apply to the use of mobile phones. First, it is uncertain how to apply the results obtained in rats and mice to humans. Second, many of the studies that showed increased tumor development

used animals that had already been treated with cancer-causing chemicals, and other studies exposed the animals to the RF virtually continuously — up to 22 hours per day.

For the past five years in the United States, the mobile phone industry has supported research into the safety of mobile phones. This research has resulted in two findings in particular that merit additional study:

1 In a hospital-based, case-control study, researchers looked for an association between mobile phone use and either glioma (a type of brain cancer) or acoustic neuroma (a benign tumor of the nerve sheath). No statistically significant association was found between mobile phone use and acoustic neuroma. There was also no association between mobile phone use and gliomas when all types of types of gliomas were considered together. It should be noted that the average length of mobile phone exposure in this study was less than three years.

2 When 20 types of glioma were considered separately, however, an association was found between mobile phone use and one rare type of glioma, neuroepithelliomatous tumors. It is possible with multiple comparisons of the same sample that this association occurred by chance. Moreover, the risk did not increase with how often the mobile phone was used, or the length of the

calls. In fact, the risk actually *decreased* with cumulative hours of mobile phone use. Most cancer causing agents increase risk with increased exposure. An ongoing study of brain cancers by the National Cancer Institute is expected to bear on the accuracy and repeatability of these results.(1)

3   Researchers conducted a large battery of laboratory tests to assess the effects of exposure to mobile phone RF on genetic material. These included tests for several kinds of abnormalities, including mutations, chromosomal aberrations, DNA strand breaks, and structural changes in the genetic material of blood cells called lymphocytes. None of the tests showed any effect of the RF except for the micronucleus assay, which detects structural effects on the genetic material. The cells in this assay showed changes after exposure to simulated cell phone radiation, but only after 24 hours of exposure. It is possible that exposing the test cells to radiation for this long resulted in heating. Since this assay is known to be sensitive to heating, heat alone could have caused the abnormalities to occur. The data already in the literature on the response of the micronucleus assay to RF are conflicting. Thus, follow-up research is necessary.(2)

FDA is currently working with government, industry, and academic groups to ensure the proper follow-up to these industry-funded research findings. Collaboration with the Cellular Telecommunications Industry Association (CTIA) in particular is expected to lead to FDA providing research recommendations and scientific oversight of new CTIA-funded research based on such recommendations.

Two other studies of interest have been reported recently in the literature:

1   Two groups of 18 people were exposed to simulated mobile phone signals under laboratory conditions while they performed cognitive function tests. There were no changes in the subjects' ability to recall words, numbers, or pictures, or in their spatial memory, but they were able to make choices more quickly in one visual test when they were exposed to simulated mobile phone signals. This was the only change noted among more than 20 variables compared.(3)

2   In a study of 209 brain tumor cases and 425 matched controls, there was no increased risk of brain tumors associated with mobile phone use. When tumors did exist in certain locations, however, they were more likely to be on the side of the head where the mobile phone was used. Because this occurred in only a small number of cases, the increased likelihood was too small to be statistically significant.(4)

In summary, we do not have enough information at this point to assure the public that there are, or are not, any low incident health problems associated with use of mobile phones. FDA continues to work with all parties, including other federal agencies and industry, to assure that research is undertaken to provide the necessary answers to the outstanding questions about the safety of mobile phones.

What is known about cases of human cancer that have been reported in users of hand-held mobile phones?

Some people who have used mobile phones have been diagnosed with brain cancer. But it is important to understand that this type of cancer also occurs among people who have not used mobile phones. In fact, brain cancer occurs in the U.S. population at a rate of about 6 new cases per 100,000 people each year. At that rate, assuming 80 million users of mobile phones (a number increasing at a rate of about 1 million per month), about 4800 cases of brain cancer would be expected each year among those 80 million people, whether or not they used their phones. Thus it is not possible to tell whether any individual's cancer arose because of the phone, or whether it would have happened anyway. A key question is whether the risk of getting a particular form of cancer is greater among people who use mobile phones than among the rest of the population. One way to

answer that question is to compare the usage of mobile phones among people with brain cancer with the use of mobile phones among appropriately matched people without brain cancer. This is called a case-control study. The current case-control study of brain cancers by the National Cancer Institute, as well as the follow-up research to be sponsored by industry, will begin to generate this type of information.

What is FDA's role concerning the safety of mobile phones?

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

Although the existing scientific data do not justify FDA regulatory actions at this time, FDA has urged the mobile phone industry to take a number of steps to assure public safety. The agency has recommended that the industry:

- support needed research into possible biological effects of RF of the type emitted by mobile phones;
- design mobile phones in a way that minimizes any RF exposure to the user that is not necessary for device function; and
- cooperate in providing mobile phone users with the best possible information on what is known about possible effects of mobile phone use on human health.
- At the same time, FDA belongs to an interagency working group of the federal agencies that have responsibility for different aspects of mobile phone safety to ensure a coordinated effort at the federal level. These agencies are:
- National Institute for Occupational Safety and Health
- Environmental Protection Agency
- Federal Communications Commission
- Occupational Health and Safety Administration
- National Telecommunications and Information Administration

The National Institutes of Health also participates in this group.

In the absence of conclusive information about any possible risk, what can concerned individuals do?

If there is a risk from these products — and at this point we do not know that there is — it is probably very small. But if people are concerned about avoiding even potential risks, there are simple steps they can take to do so. For example, time is a key factor in how much exposure a person receives. Those persons who spend long periods of time on their hand-held mobile phones could consider holding lengthy conversations on conventional phones and reserving the hand-held models for shorter conversations or for situations when other types of phones are not available.

People who must conduct extended conversations in their cars every day could switch to a type of mobile phone that places more distance between their bodies and the source of the RF, since the exposure level drops off dramatically with distance. For example, they could switch to:

- a mobile phone in which the antenna is located outside the vehicle,
- a hand-held phone with a built-in antenna connected to a different antenna mounted on the outside of the car or built into a separate package, or

- a headset with a remote antenna to a mobile phone carried at the waist.

Again, the scientific data *do not* demonstrate that mobile phones are harmful. But if people are concerned about the radiofrequency energy from these products, taking the simple precautions outlined above can reduce any possible risk.

Where can I find additional information?

For additional information, see the following websites:

- **Federal Communications Commission** (FCC) RF Safety Program (select "Information on Human Exposure to RF Fields from Cellular and PCS Radio Transmitters"): http://www.fcc.gov/oet/rfsafety.

- **World Health Organization** (WHO) International Commission on Non-Ionizing Radiation Protection (select Qs & As): http://www.who.int/emf

- **United Kingdom, National Radiological Protection Board**: http://www.nrpb.org.uk .

- **Cellular Telecommunications Industry Association** (CTIA): http://www.wow-com.com .

- **U.S. Food and Drug Administration** (FDA) Center for Devices and Radiological Health: http://www.fda.gov/cdrh/consumer/ .

References:

1. Muscat et al. Epidemiological Study of Cellular Telephone Use and Malignant Brain Tumors. In: State of the Science Symposium;1999 June 20; Long Beach, California.

2. Tice et al. Tests of mobile phone signals for activity in genotoxicity and other laboratory assays. In: Annual Meeting of the Environmental Mutagen Society; March 29, 1999, Washington, D.C.; and personal communication, unpublished results.

3. Preece, AW, Iwi, G, Davies-Smith, A, Wesnes, K, Butler, S, Lim, E, and Varey, A. Effect of a 915-MHz simulated mobile phone signal on cognitive function in man. Int. J. Radiat. Biol., April 8, 1999.

4. Hardell, L, Nasman, A, Pahlson, A, Hallquist, A and Mild, KH. Use of cellular telephones and the risk for brain tumors: a case-control study. Int. J. Oncol., 15: 113-116, 1999.

Driving Safety Tips

"Safety is your most important call!"

Your Motorola wireless telephone gives you the powerful ability to communicate by voice — almost anywhere, anytime, wherever wireless phone service is available and safe conditions allow. But an important responsibility accompanies that benefits of wireless phones, one that every user must uphold.

When driving a car, driving is your first responsibility. If you find it necessary to use your wireless phone while behind the wheel of a car, practice good common sense and remember the following tips:

• Get to know your Motorola wireless phone and its features such as speed dial and redial. If available, these features help you to place your call without taking your attention off the road.

• When available, use a hands-free device. If possible, add an additional layer of convenience to your wireless phone with one of the many Motorola Original hands-free accessories available today.

• Position your wireless phone within easy reach. Be able to access your wireless phone without removing your eyes from the road. If you receive an incoming call at an inconvenient time, if possible, let your voice mail answer it for you.

• Let the person you are speaking with know you are driving; if necessary, suspend the call in heavy traffic or hazardous weather conditions. Rain, sleet, snow, ice, and even heavy traffic can be hazardous.

• If you receive an incoming call at an inconvenient time do not take notes or look up phone numbers while driving. Jotting down a "to do" list or going through your address book takes attention away from your primary responsibility — driving safely.

• Dial sensibly and assess the traffic; if possible, place calls when you are not moving or before pulling into traffic. Try to plan calls when your car will be stationary. If you need to make a call while moving, dial only a few numbers, check the road and your mirrors, then continue.

• Do not engage in stressful or emotional conversations that may be distracting. Make people you are talking with aware you are driving and suspend conversations which have the potential to divert your attention away from the road.

• Your phone can perform many other functions besides allowing you to make and receive calls. Do not let these features distract you from driving. Use them only when it is safe to do so.

Driving Safety Tips

- Use your wireless phone to call for help. Dial 9-1-1 or other local emergency number in the case of fire, traffic accident or medical emergencies.
- Use your wireless phone to help others in emergencies. If you see an auto accident, crime in progress or other serious emergency where lives are in danger, call 9-1-1 or other local emergency number, as you would want others to do for you.
- Call roadside assistance or a special non-emergency wireless assistance number when necessary. If you see a broken-down vehicle posing no serious hazard, a broken traffic signal, a minor traffic accident where no one appears injured, or a vehicle you know to be stolen, call roadside assistance or other special non-emergency wireless number.

Limited Warranty Motorola Communication Products

Note: This Warranty applies within the fifty (50) United States and the District of Columbia.

I. What This Warranty Covers and For How Long:

MOTOROLA, INC. ("MOTOROLA") warrants the MOTOROLA manufactured Communication Products listed below ("Product") against defects in material and workmanship under normal use and service for a period of time from the date of purchase as scheduled below:

Wireless Local Area Network Subscribers Units	**One (1) Year**
Product Accessories	**One (1) Year**
Batteries	**One (1) Year**

Rechargeable Batteries will be replaced during the applicable warranty period if:

a. the battery capacity falls below 80% of rated capacity, or

b. the battery develops leakage.

MOTOROLA, at its option, will at no charge either repair the Product (with new or reconditioned parts), replace it (with a new or reconditioned Product), or refund the purchase price of the Product during the warranty period provided it is returned in accordance with the terms of this warranty. Replaced parts or boards are warranted for the balance of the original applicable warranty period. All replaced parts of Product shall become the property of MOTOROLA.

This express limited warranty is extended by MOTOROLA to the original end user purchaser only and is not assignable or transferable to any other party. This is the complete warranty for the Product manufactured by MOTOROLA. MOTOROLA assumes no obligations or liability for additions or modifications to this warranty unless made in writing and signed by an officer of MOTOROLA. Unless made in a separate agreement between MOTOROLA and the original end user purchaser, MOTOROLA does not warrant the installation, maintenance or service of the Product.

MOTOROLA cannot be responsible in any way for any ancillary equipment not furnished by MOTOROLA which is attached to or used in connection with the Product, or for operation of the Product with any ancillary equipment, and all such equipment if expressly excluded from this warranty.

Limited Warranty Motorola Communication Products

Because each system which may use the Product is unique, MOTOROLA disclaims liability for range, coverage, or operation of the system as a whole under this warranty.

II. General Provisions:

This warranty sets forth the full extent of MOTOROLA'S responsibilities regarding the Product, Repair, replacement or refund of the purchase price, at MOTOROLA'S options, is the exclusive remedy. THIS WARRANTY IS GIVEN IN LIEU OF ALL OTHER EXPRESS WARRANTIES. IMPLIED WARRANTIES, INCLUDING WITHOUT LIMITATION, IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE LIMITED TO THE DURATION OF THIS LIMITED WARRANTY TO THE FULL EXTENT SUCH MAY BE DISCLAIMED BY LAW. IN NO EVENT SHALL MOTOROLA BE LIABLE FOR DAMAGES IN EXCESS OF THE PURCHASE PRICE OF THE PRODUCT, FOR ANY LOSS OF USE, LOSS OF TIME, INCONVENIENCE, COMMERCIAL LOSS, LOST PROFITS OR SAVINGS OR OTHER INCIDENTAL, SPECIAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OR INABILITY TO USE SUCH PRODUCT, TO THE FULL EXTENT SUCH MAY BE DISCLAIMED BY LAW.

III. STATE LAW RIGHTS

SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCEDENTAL OR CONSEQUENTIAL DAMAGES OR LIMITATION ON HOW LONG AN IMPLIED WARRANTY LASTS, SO THE ABOVE LIMITATIONS OR EXCLUSIONS MAY NOT APPLY.

This warranty give specific legal rights, and there may be other rights which may very from state to state.

IV. How to Get Warranty Service:

You must provide proof of purchase (bearing the date of purchase and Product item serial number) in order to receive warranty service and, also, deliver or send the Product item, transportation and insurance prepaid, to an authorized warranty service location. Warranty service will be provided by MOTOROLA through one of its authorized warranty service locations. If you first contact the company which sold you the Product (e.g., dealer or communication service provider), it can facilitate your obtaining warranty service. You can also call MOTOROLA a 1-800-453-0920 for warranty service location information.

V. What This Warranty Does Not Cover:

a. Defects or damage resulting from use of the Product in other than its normal and customary manner.

b. Defects or damage from misuse, accident, water, or neglect.

c. Defects or damage from improper testing, operation, maintenance, installation, alteration, modification, or adjustment.

d. Breakage or damage to antennas unless caused directly by defects in material workmanship.

e. A Product subjected to unauthorized Product modifications, disassemblies or repairs (including, without limitation, the audition to the Product of non-MOTOROLA supplied equipment) which adversely affect performance of the Product or interfere with MOTOROLA'S normal warranty inspection and testing of the Product to verify the warranty claim.

f. Product which has had the serial number removed or made illegible.

g. Rechargeable batteries if:

1. Any of the seals on the battery enclosure of cells are broken or show evidence of tampering.

2. The damage or defect is caused by charging or using the battery in equipment or service other than the Product for which it is specified.

h. Freight costs to the repair depot.

i. A Product which, due to illegal or unauthorized alteration of the software/firmware in the Product, does not function in accordance with MOTOROLA'S published specifications or the FCC type acceptance labeling in effect for the Product at the time the Product was initially distributed from MOTOROLA.

j. Scratches or other cosmetic damage to Product surfaces that does not effect the operation of the Product.

k. Normal and customary wear and tear.

VI. Patent and Software Provisions:

MOTOROLA will defend, at its own expense, any suit brought against the end user purchaser to the extent that it is based on a claim that the Product or parts infringe a United States patent, and Motorola will pay those costs and damages finally awarded

Limited Warranty Motorola Communication Products

against the end user purchaser in any such suit which are attributable to any such claim, but such defense and payments are conditioned on the following:

a. That MOTOROLA will be notified promptly in writing by such purchaser of any notice of such claim;

b. That MOTOROLA will have sole control of the defense of such suit and all negotiations for its settlement or compromise; and

c. Should the Product or parts become, or in MOTOROLA'S opinion be likely to become, the subject of a claim of infringement of a patent, that such purchaser will permit MOTOROLA, at its option and expense, either to procure for such purchaser the right to continue using the Product or parts or to replace or modify the same so that it becomes non-infringing or to grant such purchaser a credit for the Product or parts as depreciated and accept its return. The depreciation will be an equal amount per year over the lifetime of the Product or parts as established by MOTOROLA.

MOTOROLA will have no liability with respect to any claim of patent infringement which is based upon the combination of the Product or parts furnished hereunder with software, apparatus or devices not furnished by MOTOROLA, nor will MOTOROLA

have any liability for the use of ancillary equipment or software not furnished by MOTOROLA which is attached to or sued in connection with the Product or any parts thereof.

Laws in the United States and other countries preserve for MOTOROLA certain exclusive rights for copyrighted MOTOROLA software, such as the exclusive rights to reproduce in copies and distribute copies of such MOTOROLA software. MOTOROLA software may be used in only the Product in which the software was originally embodied and such software in such Product may not be replaced, copied, distributed, modified in any way, or used to produce any derivative thereof. No other use including, without limitation, alteration, modification, reproduction, distribution, or reverse engineering of such MOTOROLA software or exercise or rights in such MOTOROLA software is permitted. No license is granted by implication, estoppel or otherwise under MOTOROLA patent rights or copyrights.

Patent and Trademark Information

MOTOROLA, the Stylized M Logo and all other trademarks indicated as such herein are trademarks of Motorola, Inc. ® Reg. U.S. Pat. & Tm. Off. © 2004 Motorola, Inc. All rights reserved.

Microsoft and Microsoft Internet Explorer are registered trademarks of Microsoft Corporation.

T9 is a trademark owned by Tegic Communications.

T9® Text Input Patent and Trademark Information

This product is covered by U.S. Pat. 5,818,437, U.S. Pat. 5,953,541, U.S. Pat. 6,011,554 and other patents pending.

Java and all other Java-based marks are trademarks or registered trademarks of Sun Microsystems, Inc. in the U.S. and other countries.

All other product or service names are the property of their respective owners. All trademarks, service marks and trade names used in this Guide are protected by state, federal and/or international trademark laws. All rights reserved.

Software Copyright Notice

The Motorola products described in this manual may include copyrighted Motorola and third party software stored in semiconductor memories or other media. Laws in the United States and other countries preserve for Motorola and third party software providers certain exclusive rights for copyrighted software, such as the exclusive rights to distribute or reproduce the copyrighted software. Accordingly, any copyrighted software contained in the Motorola products may not be modified, reverse-engineered, distributed, or reproduced in any manner to the extent allowed by law. Furthermore, the purchase of the Motorola products shall not be deemed to grant either directly or by implication, estoppel, or otherwise, any license under the copyrights, patents, or patent applications of Motorola or any third party software provider, except for the normal, non-exclusive, royalty-free license to use that arises by operation of law in the sale of a product.

Index