

APPLICANT: MOTOROLA, INC.

FCC ID: IHDT56CE1

INSTRUCTION MANUAL

A preliminary draft copy of the Users Manual follows:

Welcome

Internal Antenna

Earpiece

Left Soft Key

Perform functions identified by left display prompt.

Right Soft Key

Perform functions identified by right display prompt.

Menu Key

Open a menu when you see ☰ in the display

Send/Answer Key

Make and answer calls; press in idle to see recent dialed calls.

Power/End Key

Press & hold to power phone on & off.
Press & release to end phone calls, exit menu system.

Navigation Key

Scroll through lists, set volume.

Microphone

Headset Connector Port

USB Connector Port

Insert data cable.

Power Connector Port

Insert charger.

Your C330 series phone lets you change convertible covers and keypads (see “Changing Your Phone’s Cover” on page 17). Your phone may not appear exactly as the phone image above.

Note that all key locations, sequences and functions remain the same with any of the various convertible covers.

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Libertyville, Illinois 60048

1-800-331-6456 (United States)
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Manual number:

Cover number:

Menu Map






Main Menu

- Voice Dial
- Recent Calls
- Chat *
- Media Center
 - My Tones
 - MotoMix
 - Picture Viewer
- Ring Styles
- Games
- Browser *
- Datebook
- Calculator
- Settings
 - (see next page)
- Phonebook
- Web Sessions *
- Messages *
- MyMenu
- SIM Applications *
- Fix Dial
- Service Dial *
- Quick Dial

Note: This is the standard phone menu layout. You or your service provider may have changed the menu layout or changed some feature names.

Not all features may be available for all users.

* optional network, SIM card, or subscription-dependent features

Shortcuts
In idle, press  up or down to open Phonebook , right or left to adjust volume
Display my phone number: Press  
Go to dialed calls list: Press 
Exit menu system: Press 

See page 49 for
MyMenu Shortcuts

Settings Menu

- **Call Forward ***
 - Voice Calls
 - Data Calls
 - Cancel All
 - Forward Status
- **Phone Status**
 - My Tel. Numbers *
 - Credit Info/Available *
 - Active Line
 - Battery Meter
 - Other Information
- **In-Call Setup**
 - In-Call Timer
 - Call Cost Setup *
 - My Caller ID
 - Answer Options
 - Call Waiting *
- **Security**
 - Phone Lock
 - Lock Application
 - Fixed Dial
 - Call Barring *
 - SIM Pin
 - New Passwords
- **Other Settings**
 - Personalize
 - Main Menu
 - Keys
 - Greeting *
 - Quick Dial *
 - Initial Setup
 - Time and Date
 - 1-Touch Dial
 - Backlight
 - Scroll
 - Animation
 - Language
 - Battery Save
 - Contrast
 - DTMF
 - Master Reset
 - Master Clear
 - Network
 - Car Settings
 - Headset

Note: Not all features may be available for all users.

* optional network, SIM card, or subscription-dependent features

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PRELIMINARY

Safety and General Information



IMPORTANT INFORMATION ON SAFE AND EFFICIENT OPERATION. READ THIS INFORMATION BEFORE USING YOUR PHONE.

The information provided in this document supersedes the general safety information contained in user guides published prior to July 2000. For information regarding radio use in a hazardous atmosphere please refer to the Factory Mutual (FM) Approval Manual Supplement or Instruction Card, which is included with radio models that offer this capability.

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.

RF Operational Characteristics

Your phone contains a transmitter and a receiver. When it is ON, it receives and transmits radio frequency (RF) energy. The phone operates in the frequency range of ___ MHz to ___ MHz and ___ MHz to ___ MHz.

When you communicate with your phone, the system handling your call controls the power level at which your phone transmits. The output power level typically may vary over a range from ___ watts to ___ watts.

Exposure To Radio Frequency Energy

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

- United States Federal Communications Commission, Code of Regulations; 47 CFR part 2 sub-part J
- American National Standards Institute (ANSI) / Institute of Electrical and Electronic Engineers (IEEE) C95. 1-1992
- Institute of Electrical and Electronic Engineers (IEEE) C95.1-1999 Edition
- National Council on Radiation Protection and Measurements (NCRP) of the United States, Report 86, 1986
- 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 1999

To assure optimal phone 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:



Portable Phone Operation and EME Exposure

Antenna Care

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

Do NOT hold the antenna when the phone is “IN USE”. Holding the antenna affects call quality and may cause the phone to operate at a higher power level than needed.

Phone Operation

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

Body-Worn Operation

To maintain compliance with FCC/Health Canada RF exposure guidelines, if you wear a phone on your body when transmitting, always place the phone in a Motorola-supplied or approved clip, holder, holster, case, or body harness for this product. Use of non-Motorola-approved accessories may exceed FCC/Health Canada RF exposure guidelines. If you do not use one of the Motorola-supplied or approved body-worn accessories, and are not using the phone held in the normal use position, **ensure the phone and its antenna**

are at least one inch (2.5 cm) from your body when transmitting.

Data Operation

When using any data feature of the phone, with or without an accessory cable, **position the phone and its antenna at least one inch (2.5 centimeters) from the body.**

Approved Accessories

For a list of approved Motorola accessories, visit our website at www.mot.com.

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 phone 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 phone when on board an aircraft. Any use of a phone must be in accordance with applicable regulations per airline crew instructions.



Medical Devices

Pacemakers



The Advanced Medical Technology Association recommends that a minimum separation of 6 inches (15 centimeters) be maintained between a handheld wireless phone and a pacemaker. These recommendations are consistent with the independent research by, and recommendations of, the United States Food and Drug Administration.

Persons with pacemakers should:

- ALWAYS keep the phone more than six inches (15 centimeters) from your pacemaker when the phone is turned ON.
- NOT carry the phone in the breast pocket.
- use the ear opposite the pacemaker to minimize the potential for interference.
- turn the phone OFF immediately if you have any reason to suspect that interference is taking place.

Hearing Aids

Some digital wireless phones 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.

Safety and General Use While Driving

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

When using your phone 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 phone in the area over an air bag or in the air bag deployment area. Air bags inflate with great force. If a portable phone is placed in the air bag deployment area and the air bag inflates, the phone may be propelled with great force and cause serious injury to occupants of the vehicle.

Potentially Explosive Atmospheres

Turn off your phone prior to entering any area with a potentially explosive atmosphere, unless it is a phone type especially qualified for use in such areas as “Intrinsically Safe.” 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 phone 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

Antennas

Do not use any portable phone that has a damaged antenna. If a damaged antenna comes into contact with your skin, a minor burn can result.

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.

ITC01-101

Getting Started



What's in the Box?

Your digital wireless phone has a permanent internal battery, and typically comes equipped with a charger. Other accessory options can customize your phone for maximum performance and portability.

To purchase Motorola Original™ accessories, please contact the Motorola Customer Call Center at 1-800-331-6456 in the United States or 1-800-461-4575 in Canada.

About This Guide

Optional Features



Features marked with this label are optional network, SIM card, and/or subscription-dependent features. These features may not be offered by all service providers in all geographical areas. Contact your service provider for information about availability.

Optional Accessories



Features marked with this label require the use of an optional Motorola Original™ accessory.

Changing Your SIM Card

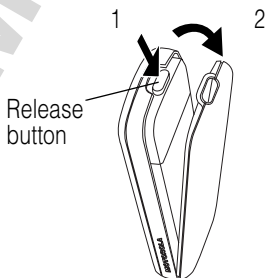
Your SIM (Subscriber Identity Module) card contains your phone number, service details, and phonebook/message memory. It must be installed in the base of the phone.

Caution: Do not bend or scratch your SIM card. Avoid exposing your SIM card to static electricity, water, or dirt.

Note: Since your C330 series phone lets you change covers and keypads, it may not appear exactly as the phone pictured. All key locations, sequences, and functions remain the same with any of the various convertible covers.

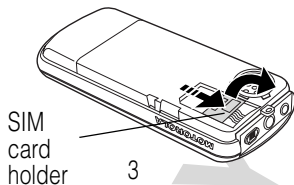
To Change Your SIM Card

- 1 Press down on the cover release button at the top of your phone
- 2 Pull the top of the phone's back cover to release it

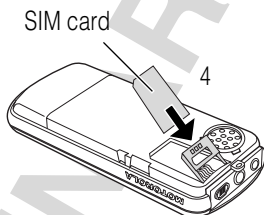


To Change Your SIM Card

- 3 Slide the metal SIM card holder back to unlock it, then lift up to open it slightly. Remove the old SIM card, if necessary.



- 4 Insert the new SIM card in the holder with the cut corner on the upper left and the gold plate facing down.



- 5 Close the SIM card holder and slide it forward to lock it.



Changing Your Phone's Cover

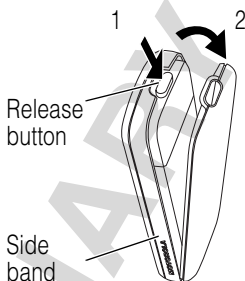
Note: Since your C330 series phone lets you change covers and keypads, it may not appear exactly as the phone pictured. All key locations, sequences, and

functions remain the same with any of the various convertible covers.

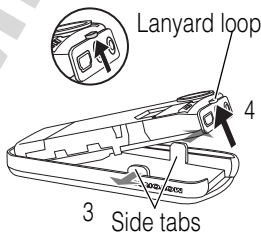
To Remove a Cover and Keypad

- 1 Press down on the cover release button at the top of your phone.
- 2 Pull the top of the phone's back cover to release it.

Note: If your cover has a removable side band, remove it at this point.



- 3 Pull the side tabs away from the phone, then
- 4 Lift up on the lanyard loop to pull the phone out of the front cover.

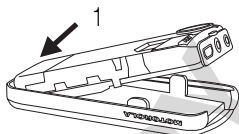


Note: Always use Motorola Original™ covers. The phone warranty does not cover damage caused from using non-Motorola accessories.

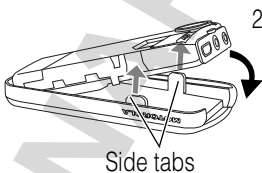
Always use the keypad and side band (if applicable) that matches the new cover.

To Install a Cover and Keypad

- 1 Slide the top of the phone into the top of the new front cover.



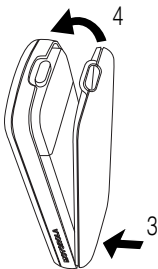
- 2 Press the bottom of the phone into the front cover until the side tabs snap into place.



Note: If your cover has a removable side band, attach it at this point.

- 3 Insert the bottom of the back cover.

- 4 Press the top of the back cover down until it hooks over the cover release button.



Resetting Your Phone

Under some conditions, your phone can become frozen on a single display. To correct this, reset your phone as follows:

To Reset Your Phone

- 1 Remove your phone's back and front cover as described in "Changing Your Phone's Cover" on page 17.

- 2 Use a small object to press the Reset button on the front of your phone.

Your phone display should be restored.

Reset button



- 3 Replace your phone's cover.

Charging the Phone

Your phone has a built-in battery. Before you can use your phone, you need to charge the battery, as indicated by the following instructions. Some batteries perform best after several full charge/discharge cycles.

To Charge the Phone

- 1 Plug the travel charger into the middle jack on the bottom of your phone.



- 2 Plug the other end of the travel charger into the appropriate electrical outlet.
- 3 When your phone indicates that it is fully charged (**Charge Complete**), remove the travel charger.

Note: When you charge the battery, the battery level indicator in the upper right corner of the display shows how much of the charging process is complete. See the “Battery Level Indicator” item on page 25.

Battery Use

To maximize your battery's performance:

- Always use Motorola Original™ battery chargers. The phone warranty does not cover damage caused from using non-Motorola battery chargers.
- New phones or phones that have been stored for long periods of time may require a longer initial charge time.
- Maintain the phone at or near room temperature when charging.




- Do not expose phones to temperatures below -10°C (14°F) or above 45°C (113°F). Always take your phone with you when you leave your vehicle.




Turning Your Phone On

To Turn Your Phone On


- 1 Press and hold  (the End/Power key)

End/
Power Key




- 2 If necessary, enter your SIM card PIN code and press OK () to unlock your SIM card

Note: If you enter an incorrect PIN code three times in a row, your SIM card is disabled and your phone displays the message **SIM Blocked**. (For more information, see “Protecting the SIM Card” on page 56.)

- 3 If necessary, enter your four-digit unlock code and press OK () to unlock your phone

Note: The unlock code is originally set to 1234. (For more information, see “Locking and Unlocking Your Phone” on page 55.)

Adjusting the Volume

You can adjust your phone's earpiece and ringer volume by pressing right and left on the :

When	You Can Adjust
you are in a call	earpiece speaker volume
the display is idle	ringer volume



Making and Answering Calls

This section summarizes the most basic calling features. For more features, see “Calling Features” on page 35.

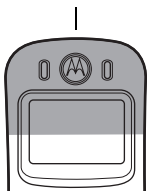
Making a Call

There is a built-in antenna in the top of your phone. Do not block the antenna while you are on a call.

To call a number, your phone must:

- be turned on and unlocked
- have a SIM card inserted and unlocked
- have a network connection with adequate signal strength

Built-in antenna



PREMIUM



To Make a Call

- 1 Enter the number with the keypad keys (up to 40 digits)

Note: If you make a mistake, press **DELETE** (⊙) to delete the last digit, or press and hold **DELETE** (⊙) to clear all digits.

- 2 Press (Ⓜ) (send key) to make the call
- 3 Press (Ⓜ) (end key) when the call is done.

Note: You can make an emergency call even when the phone is locked, or when a SIM card is not inserted. See “Dialing an Emergency Number” on page 36.

Answering a Call

To answer a call, your phone must:

- be turned on and unlocked
- have a SIM card inserted and unlocked
- have a network connection with adequate signal strength

When you receive a call, your phone rings and/or vibrates and displays an incoming call message.

To Answer a Call

- 1 Press (Ⓜ) or **ANSWER** (⊙)
- 2 Press (Ⓜ) (end key) when the call is done.

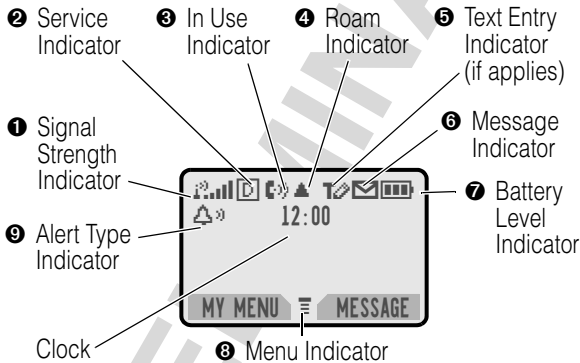
Using Your Phone

See page 1 for a diagram of basic phone components.



Display Symbols

Some of the phone functions described in this guide must be performed from the idle display. The term *idle display* refers to the standard display that you see when your phone is on and ready to use, when you are *not* on a call or using the menu system.






1 Signal Strength Indicator Shows the strength of your phone's connection with the network.

Strong       No signal

You cannot make or answer calls when the “no signal” indicator is displayed.



2 Service Indicator Indicates if you have a GPRS connection (). GPRS allows faster data transfer speeds, and your service provider may indicate when a GPRS packet data connection is active. The indicator does not mean that you are in a call; only that you are registered on the network via a GPRS connection.

3 In Use Indicator Indicates when a call is in progress, and when you have a secure () or unsecure () connection.



4 Roam Indicator Appears when your phone uses another network system outside your home network. When you leave your home network area, your phone *roams* or seeks another network. Icons here can also indicate your text entry mode (alpha, numeric, symbol, etc.)

5 Text Entry Indicator Indicates your Text Entry Method whenever you are in a text editor (Tap, iTap, etc.). See “Entering Text” on page 32.



6 Message Indicator Indicates when you have an active Chat session, or when you have a new voice or text message waiting.

7 Battery Level Indicator Shows the amount of charge left in your battery. The more bars visible, the greater the charge.

High




Low


Recharge your battery as soon as possible when you see the **Low Battery** warning message and hear the low battery alert.

Note: When you charge the phone, the battery level indicator instead shows how much of the charging process is complete. See “Charging the Phone” on page 20.



Ⓢ Menu Indicator Indicates that you can press  to open a menu. See “Using the Menu” on page 27.


Ⓣ Alert Type Indicator Shows the current selected alert profile. The default alert setting is loud ring.

 = loud ring

 = soft ring

 = vibrate

 = vibrate and ring

 = silent


Using the Menu

Navigating to a Feature

This guide shows how to navigate to a menu feature as follows:

Find the Feature

 > Recent Calls
> Dialed Calls

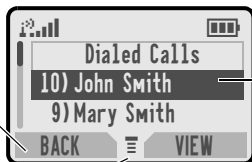
The > symbol means that you should scroll to and select the feature. This example shows that you should press , scroll to and select **Recent Calls**, then scroll to and select **Dialed Calls** to see the dialed calls list.

Selecting a Feature

Some features require you to select an item from a list:



Press **BACK** (⊙) to go back to the previous screen.



Highlighted item

A sub-menu is available. Press (≡) to open the sub-menu.

Press **VIEW** (⊙) to view details of the highlighted item.

Select an item by highlighting it using one of these approaches:

- Press (⬆) to scroll up or down to the item you want.
- In a numbered list, press a number key to highlight the item.
- In an alphabetized list, press a key multiple times to cycle through the letters on the key and highlight the closest matching list item.

Setting Up Your Phone

You can adjust a wide variety of phone settings to suit your needs. You can download pictures and sounds to use as your wallpaper, screen saver, animation, or alert tones. See “Downloading Pictures, Games, and Sounds” on page 61.

Setting the Time and Date

Find the Feature

- ☰ > Settings
- > Other Settings
- > Initial Setup
- > Time and Date



Changing Personal Greetings



To change the text displayed when you turn on your phone:

Find the Feature

- ☰ > Settings
- > Other Settings
- > Personalize
- > Greeting

Choosing Alert and Ring Tones

Your phone rings or vibrates to notify you of an incoming call, message, or other event. This ring or vibration is called an *alert*. You can select one of five different alert profiles:

- | | |
|---|--|
|  Loud ring |  Soft ring |
|  Vibrate |  Ring and vibrate |
|  Silent | |

The alert setting indicator in your display shows the current alert profile (see illustration on page 25).

Each alert profile contains settings for ringer and keypad volume. It also includes alert tone settings for different events: incoming calls, text messages, voicemail



messages, data calls, alarms, and reminders. You can modify the settings in each profile.

Note: To mix your own alert tones, see “MotoMix Sound Editor” on page 64.

Select an Alert Profile

Find the Feature  > Ring Styles > Alert
> the profile

Customize an Alert Profile

You can customize a profile by changing the alerts used for specific events (such as incoming calls, text messages, etc.).

Find the Feature  > Ring Styles
> alert Detail
> an event
> the event alert

Setting Your Display Features

You can change the appearance of your display.

Find the Feature  > Settings
> Other Settings
> Initial Setup

Choose one of the following display settings:

Setting	Description
Backlight	the amount of time your backlight remains on (Off conserves the battery)
Contrast	the display contrast



Setting	Description
Scroll	tells the cursor to stop or wrap around when it reaches the end of a list in the display
Animation	makes your phone's menus move smoothly as you scroll up and down (Off conserves the battery)
Wallpaper	a graphic that appears as the background in your phone display
Screen Saver	an animation that appears in your display when your phone is inactive
Battery Save	Adjusts the phone's power usage to conserve power

Resetting All Options

To reset all options back to their factory settings except for the unlock code, security code, and lifetime timer:

Find the Feature



- > Settings
- > Other Settings
- > Initial Setup
- > Master Reset

Clearing All Information

To reset all options back to their factory settings *and* clear all user entries (such as Phonebook entries and downloaded wallpapers, screen savers, and sounds):

Warning: This option erases all user-entered information stored in your phone's memory, including phonebook and datebook entries and downloaded files. Once you erase

the information, it cannot be recovered. It resets all options back to their factory settings except for the unlock code, security code, and lifetime timer.



Find the Feature



- > Settings
- > Other Settings
- > Initial Setup
- > Master Clear

Setting Other Preferences

To customize other settings on your phone:

- **Calls:** See “Forwarding a Call” on page 39 and “Barring a Call” on page 41
- **Menus:** See “Customizing Menus” on page 49 and “Using MyMenu” on page 49
- **Pictures and Sounds:** See “Downloading Pictures, Games, and Sounds” on page 61, “Creating Alert Tones” on page 64, “MotoMix Sound Editor” on page 64, and “Assigning Phone Themes” on page 62

Entering Text

Various text entry methods make it easy for you to enter names, numbers, and text messages on your phone.

Character Chart


Use this chart as a guide for entering spaces, numbers, letters, symbols, and other characters with the **Tap Method**

text mode. Press the same key repeatedly to cycle through available characters.

1 [space]	space . 1 ? ! , @ _ & ~ : ; " - () ' ¿ ¡ % £ \$ ¥ ¤ €
2 ABC	a b c 2 ä å á à â ã α β ç
3 DEF	d e f 3 δ ë é è ê φ
4 GHI	g h i 4 ï í î γ
5 JKL	j k l 5 λ
6 MNO	m n o 6 ñ ö ø ó ò ô õ ω
7 PQRS	p q r s 7 π β σ
8 TUV	t u v 8 θ ü ú ù û
9 WXYZ	w x y z 9 ξ ψ
0+ [0]	+ - 0 x * / \ [] = > < # §

Your phone model may not include all of the characters shown in the above chart.

Choosing a Text Mode

To activate a text mode, press  from any text entry screen and select the text mode from the menu:

iTAP

Let the phone predict each word as you enter it, then choose the word from a list (see “Predictive Text Entry with iTAP™ Software” on page 34).

Tap Method

Enter characters one at a time by pressing the key for the letter, number, or symbol. This is the standard mode for entering text on your phone.





Numeric	Enter numbers only.
Symbol	Enter symbols only.
Browse	Browse through your phonebook and recent calls lists to select a name or number to enter.

Note: The text mode you select remains active until you change it by selecting another mode.

General Text Entry Rules

- If you do not press a key for two seconds, the character in the block cursor is accepted, and the cursor moves to the next position.
- The first character of each sentence is capitalized unless you manually change it. (Press up or down to change the character to upper or lower case while it is highlighted.)

Predictive Text Entry with iTAP™ Software

iTAP™ software provides a predictive text entry method that lets you enter the letters of a word using only one keypress per letter.

For example, to spell the word “act,” press :

Flashing cursor indicates insertion point.



Press to scroll and see additional word choices.

Press **DELETE** () to clear the last letter entered.

Press **SELECT** () to insert the highlighted word.

Calling Features

This chapter describes features related to making and answering calls. For information about other call-related features, see “Viewing Recent Calls” on page 38 and “Data Calls” on page 52. For basic instructions on how to make and answer calls, see pages 23–24.



Redialing a Number

You can redial a previously dialed phone number, whether the call was connected or busy. From the idle display, press **Ⓢ**, select the call you want to redial, and press **Ⓢ** again.

Using Automatic Redial

If you receive a busy signal, your phone displays **Call Failed**.

When automatic redial is turned on, your phone automatically makes a number of redial attempts until the call goes through. When the call goes through, your phone rings or vibrates one time, displays the message **Redial Successful**, and then connects the call.


Find the Feature

- ☰** > Settings
- > Other Settings
- > Initial Setup
- > Auto Redial

Using Caller ID



The *calling line identification* (caller ID) feature lets you see who is calling before you answer.


- If the caller's name is stored in your phonebook, the phone automatically displays the **Name** or **Icon ID**. Otherwise, the phone displays the caller's phone number. To create or change a phonebook entry, see "Storing a Phonebook Entry" on page 46.
- If caller ID information is not available, your phone displays the message **Incoming Call**.
- While dialing (with digits visible in the display), Press  > **Hide ID/Show ID** to Hide (or show) your caller ID for the next call

Dialing an Emergency Number

Your service provider programs one or more emergency phone numbers (such as 112 or 911) that you can call under any circumstances. You can dial and call the emergency number even when your phone is locked, when you are prompted to enter a code or password, when the SIM card is not inserted in your phone, or when the SIM card is blocked or disabled.


Note: Emergency numbers vary by country. Your phone's emergency number(s) may not work in all locations.

To call the emergency number at any time:

Press	To
1 keypad keys	dial the emergency number (such as 112)
2 	call the emergency number



Inserting Special Characters into Dialing Sequences

While dialing (with digits visible in the display), you can press  and insert one of the following:

Option	Description
Insert Pause (inserts a p)	Your phone waits until the call connects before it dials the next digit(s) in the series
Insert Wait (inserts a w)	Your phone waits until the call connects, then prompts you for confirmation before it dials the next digit(s)
Insert 'n' (inserts an n)	Your phone prompts you for a number before dialing the call. The number you enter is inserted into the dialing sequence in place of the n

Viewing Recent Calls

You can view and call numbers from calls you recently dialed or received:

Find the Feature



- > Recent Calls
- > Received Calls or Dialed Calls

Using Voicemail



You can listen to your voicemail messages by calling your network voicemail phone number. Voicemail messages are stored on the network—not on your phone. Contact your service provider for more details.

Storing Your Voicemail Number

Store your voicemail number in your phone to make it faster and easier to use voicemail. Your voicemail number is provided by your service provider.

Find the Feature



- > Messages
- > VoiceMail Setup

Listening to a Voicemail Message

To listen to your voicemail messages at any time:.



Find the Feature



- > Messages > VoiceMail

Speed Dialing

When you store an entry in your phonebook, it is assigned a unique speed dial number. You can then use the speed

dial feature to call the entry. In the idle display, just enter the speed dial number and press  .

One-Touch Dialing


You can call phonebook entries 1 through 9 with the push of a single key. Press and hold the one-digit speed dial number for one second. You must Assign the 1-touch dial feature to numbers 1 through 9 in your phone memory phonebook or SIM card phonebook:

Find the Feature

-  > Settings
- > Other Settings
- > Initial Setup
- > 1-Touch Dial

Using Call Waiting



If you subscribe to call waiting, an alert tone sounds while you are on a call to indicate that you have received a second call. To put the first call on hold and answer the second call, press . To activate or deactivate call waiting:

Find the Feature

-  > Settings
- > In-Call Setup
- > Call Waiting

Forwarding a Call



Call forwarding sends your phone's incoming calls directly to another phone number.



Find the Feature

☰ > Settings
> Call Forward

The call forwarding options are:

Setting	Description
All Calls	forwards all calls
If Unavailable	forwards calls if your phone is unavailable
Detailed	uses different forwarding numbers if you are out of range, unable to answer, or busy (<i>voice calls only</i>)
Off	does not forward calls

Linking Calls



To talk to more than one person on a call, you can make a conference call. Call the first person and press **HOLD** (⊙), then call the second person and press **LINK** (⊙).

Transferring a Call

You can directly transfer a call without talking to the person who answers. During a call: Enter the phone

Find the Feature

☰ > Transfer

number where you are transferring the call and press ⊙.

Barring a Call



Call barring lets you restrict outgoing or incoming calls. You can restrict all calls, calls to international numbers, or calls while roaming.



Find the Feature



> Settings > Security
> Call Barring

Putting a Call on Hold

While you are on a call:

Do This	To
Press HOLD (☉) (if available) or Press ☰ > Hold	put a call on hold Your phone displays a 📞 (flashing phone) indicator to indicate that the call is on hold.

Messages




Text messages are brief messages that you can send and receive (such as **Where are we meeting?**). Received messages appear on your phone display or in your text message inbox.

You must set up the text message inbox *before* you can send and receive these messages. Contact your service provider for details.

Note: Your service provider may have already programmed the text message inbox settings for you.

Sending Messages and Files

You can send text messages and pictures or sounds to one or more recipients. You can manually enter each recipient's phone number, or select one or more numbers from the phonebook or recent calls lists.

Note: When you manually enter multiple phone numbers in the To field, you must insert a space between each number. Press and hold  to insert a space as needed.

Find the Feature



> Messages



> Create Message

Complete the message contents:

Item	Description
To	<p>Enter one or more phone numbers or email addresses where you want to send the message.</p> <p>You can press BROWSE (⊙) to select recipients from the phonebook or recent calls lists</p>
Msg	<p>Enter the text message (see “Entering Text” on page 32).</p> <p>To insert a picture, animation, or sound file in the message, press:</p> <p>☰ > Insert > <i>object type</i> > <i>object</i></p>



Viewing Message Status

Text messages that you send are stored in the outbox. To view the contents of your outbox:

Find the Feature ☰ > **Messages** > **Outbox**


Messages are sorted from newest to oldest. The following icons indicate message status:

» = sending in progress ✉ = delivered


✘ = sending failed

Receiving and Reading Messages



When you receive a new message, your phone displays **New Message**  and gives an alert. Press **READ** (⊙) to open the message (or your text message inbox if there are multiple messages).

Note: When your inbox is full, any new message replaces the oldest unlocked message.

While reading a message, you can press  to view the **Text Msg Menu** that includes the following options:

Option	Description
Go To	Go to a Web address (URL) in the message.
Forward	Open a copy of the text message, with an empty To field.
Store	Store a message attachment (picture, animation, or sound file) or a phone number in the message. Note: You can also save some attachments as your Wallpaper , Screen Saver , or Ring Tone .

Phonebook

You can store a list of names and phone numbers or email addresses in your phone's electronic phonebook. You can view these entries and call them directly from your phone.



For email addresses, you can send a text message directly from your phone.

To see the list of names stored in your phonebook, press **☰** > **Phonebook** from the idle display. Scroll to a name and press **VIEW** (**⊙**) to view details of the phonebook entry as shown in the following display.

Items in a Phonebook Entry

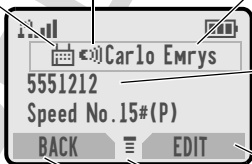
Type indicator identifies number type:

- Work
- Home
- Main
- Mobile
- Fax
- Pager
- Email

Voice Name indicator indicates a recorded voice name

Entry's **Name**

Entry's **phone number, email address, or mailing list** members.



Edit entry

Return to list

Press **☰** to open the **Phonebook Menu**

Notes:

- **Email Address** entries, **Mailing List** entries, and entries stored on the SIM card do not have **Type**, **Voice Name**, **Icon ID**, or **Ringer ID** information.
- If the phonebook entry is a mailing list, list members are listed after the entry's name




Storing a Phonebook Entry

Find the Feature

- > Phonebook
- > New
- > Phone Number or Email Address or Mailing List

Phonebook item	Description
Name	a name for the phonebook entry (see “Entering Text” on page 32)
No., Email, or Members	the phone number or email address, or select phonebook entries to add as members of the mailing list
Type	the type of phone number (only for phone numbers not stored on the SIM)



Phonebook item	Description
Voice Name	record a voice name for the entry. Press and release RECORD (⊙), then say the entry's name (in two seconds).
Speed No.	the number you use to <i>speed dial</i> the entry. Entries with a speed dial number from 1 to 100 are stored on the phone. Entries with a speed dial number of 101 or higher are stored on the SIM card.
Icon ID	 the icon that should appear when you receive calls or messages from this entry
Ringer ID	the alert your phone should use when you receive calls or messages from this entry
More	create another entry with the same Name

Dialing a Phonebook Entry

You can use the phonebook list, voice dial, speed dial, or 1-touch dial to call a number stored in your phonebook. To use speed dial, see “Speed Dialing” on page 38. To use 1-touch dial, see “One-Touch Dialing” on page 39.

Phonebook List

Find the Feature ☰ > Phonebook

Select the entry and press Ⓞ.

Voice Dial

Find the Feature ☰ > Voice Dial

Say the pre-recorded phonebook entry name.

Editing a Phonebook Entry

You can edit a phonebook entry stored on your phone or the SIM card. If you change an entry's speed dial number, the entry is moved to the new speed dial location and the original entry is deleted.

Note: You can also use the following procedure to edit a fixed dial entry by scrolling to and selecting **Fix Dial**.

Find the Feature ☰ > Phonebook

Select the entry and press ☰ > **Edit** or **Delete**.

For a description of the items in a phonebook entry or fixed dial entry, see “Items in a Phonebook Entry” on page 45 and “Storing a Phonebook Entry” on page 46.

Customizing Your Phone Settings



You can adjust your phone's menus and features.

Customizing Menus

You can customize the order of the items in your phone's main menu, depending upon your usage.

Find the Feature

- ☰ > Settings
- > Other Settings
- > Personalize
- > Main Menu

Select an item and press **GRAB** (⊙), then scroll to its new location and press **INSERT** (⊙).

Using MyMenu

MyMenu lets you quickly access your favorite menu features. MyMenu is pre-programmed with shortcuts to several features (see "Shortcuts" on page 3), but you can add more.

You can use MyMenu from the idle display, while on a call, or while scrolling through a menu. Just press ☰ and then the MyMenu key number (1...⊙ through 9 WXYZ 9 WXYZ).

To add a menu item to the MyMenu list, just select the item and hold ☰ until the phone asks you for a confirmation.

Getting More Out of Your Phone



Dialing Options



Fixed Dialing

When you activate the fixed dial feature, users can only call the numbers in the fixed dial list.

Find the Feature



> Settings > Security
> Fixed Dial

Fixed dial list entries can be any length. If there is a fixed dial entry for the digits 555, users can call any number that starts with 555. You must enter your SIM PIN2 code, from your network service provider, to edit fixed dial entries.


Find the Feature



> Fixed Dial

In the fixed dial list, you can create, edit, delete, and sort entries just like in the phonebook list. Fixed dial list entries are stored on your SIM card and do not have **Type** or **Voice Name** fields.

Sending DTMF Tones

While you are on a call, you can send keypresses as tones by pressing  > Send Tones.

To set DTMF tones to be long, short, or off:

Find the Feature

- ☰ > Settings
- > Other Settings
- > Initial Setup > DTMF



Monitoring Phone Use

Network connection time is the elapsed time from the moment you connect to your service provider's network to the moment you end the call by pressing ☎. This time includes busy signals and ringing.

The amount of network connection time you track on your resettable timer may not equal the amount of time for which you are billed by your service provider. For billing information, please contact your service provider directly.

To view a call timer:

Find the Feature

- ☰ > Recent Calls
- > Call Times

You can view the approximate network connection time elapsed during the following calls:

Timer	Description
Last Call	Time spent on the last call dialed or received. You cannot reset this timer.
Dialed Calls	Total time spent on dialed calls since the last time you reset this timer.



Timer	Description
Received Calls	Total time spent on calls received since the last time you reset this timer.
All Calls	Total time spent on dialed and received calls since the last time you reset this timer.
Lifetime	Total time spent on all calls on this phone. You cannot reset this timer.

Network Features

Data Calls



A Motorola Original™ data kit lets you transfer data between your phone and a computer or other external device. You can:

- use your phone as a modem to connect to the Internet

Note: 56K modems are capable of receiving 56Kbps from a compatible service provider. Receiving is currently limited in the U.S. and Canada to 53 Kbps, and transmitting to 33.6 Kbps. Actual speeds will vary depending on line conditions.

- use your phone to make and answer data calls on your computer or hand-held device.

For more information about Motorola Original data kits, see the Motorola Web site at:

<http://www.motorola.com/dataaccessories>
(United States)

<http://www.motorola.ca/dataaccessories>
(Canada)

Connecting Your Phone to an External Device

Connect your phone to an external device (such as a computer or hand-held device) using a USB cable.

Note: Not all devices are compatible with USB cable connections. Check your external device for specifications.

Attach the cable and do the following:

To Establish a Connection

- | | |
|--|---|
| 1 Check the phone | make sure that the phone is connected and powered on |
| 2 Open the application on your computer | place the call through the application (such as dial-up-networking)

Note: You cannot dial data numbers through your phone's keypad. You must dial them through your computer. |
| 3 End the transfer on your computer | close the call and connection when the transfer is complete |



Network Selection

You can view and adjust your phone's network settings:



Find the Feature

- ⊙ > Settings
- > Other Settings
- > Network

Your service provider registers your phone to a network. You can view information about the current network, change how your phone searches for a network, specify your preferred networks, and activate alerts that indicate when a call is dropped or network registration changes.

PRELIMINARY

Security



Line Security

If your phone displays **Line Not Secure** while you are on a call, your phone has detected another device monitoring the call. This message does not appear when caller ID, call cost, or other information fills the display.

Locking and Unlocking Your Phone


A locked phone still rings or vibrates for incoming calls or messages, *but you must unlock it to answer.*

Lock Your Phone Manually

- Find the Feature**  > Settings > Security
> Phone Lock
> Lock Now

Set Your Phone to Lock Automatically

You can set your phone to lock every time you turn it off:

- Find the Feature**  > Settings > Security
> Phone Lock
> Automatic Lock > On

Changing Your Unlock Code

Your phone's four-digit unlock code is originally set to 1234, and the six-digit security code is originally set to



000000. Your service provider may reset these numbers before you receive your phone.

If your service provider has *not* reset these numbers, we recommend that you change them to prevent other users from accessing your personal information or modifying your phone settings. The unlock code must contain four digits, and the security code must contain six digits. Be sure to make a note of the new numbers.

Find the Feature

- ⓘ > Settings > Security
- > New Passwords
- > *the password*

If You Forget a Code or Password

If you forget your unlock code, try entering 1234 or the last four digits of your phone number. If that does not work, press ⓘ and enter your security code when you see the **Enter Unlock Code** message. See your service provider if you do not know your security code.

Protecting the SIM Card

When the SIM PIN feature is activated, you must enter your SIM card PIN code each time you turn on the phone or insert a SIM card.

Find the Feature

- ⓘ > Settings > Security
- > SIM PIN > On or Off

Unblock the SIM Card PIN Code

If you enter an incorrect SIM card PIN code three times in a row, your SIM card is disabled and your phone displays the message **SIM Blocked**. You need to enter a PIN

unlocking key (PUK) code, which you can obtain from your service provider.

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



Protecting Web Transactions

The WAP Identity Module (WIM) contains information for e-commerce and other Internet security.

If WIM security is **On**, your phone prompts you for your WIM PIN whenever you turn on your phone or insert a new SIM card. To turn WIM security on or off:

Find the Feature

- ☰ > **Settings** > **Security**
- > **WIM PIN**

To change your WIM PIN, see “Changing Your Unlock Code” on page 55.

PRELIMINARY

Personal Organizer

Features



Datebook

The datebook is a calendar that lets you schedule and organize events such as appointments and meetings. You can review your schedule of events for the week or by the day, and have the datebook play a reminder alarm for specific events.

Note: You must set the phone's correct time and date in order to use the datebook (see "Setting the Time and Date" on page 29).

Storing a New Event

A title is required for a datebook event. All other information is optional.

Find the Feature



> **Datebook** > *day*



> **New**

Enter the event title, start time, duration, date, repeating events, and reminder.

Changing Event Information

To change information about an existing event:

Find the Feature



> **Datebook**

> *event date* > *event*

Select and change the event information.

Alarm Reminders

Reminders are alerts that ring or vibrate to notify you about a voicemail or text message you have received, or a datebook event you have scheduled. To set or turn off reminders:



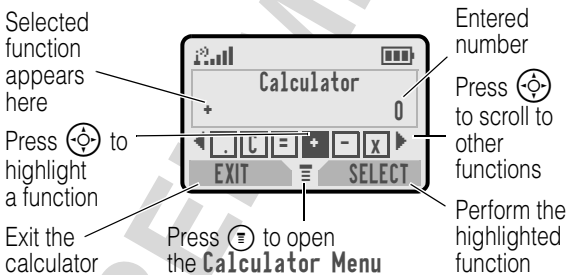
Find the Feature

- ☰ > Ring Styles
- > Alert Detail
- > Reminders > Alert

Note: **Beep** or **Vibrate** sets the corresponding reminder alert type. **Off** turns off all reminders.

Calculator

You can use your phone as a convenient calculator and currency converter.



The currency converter works just like the calculator, using the \$ (currency) function and the exchange rate you set:

Find the Feature

- ☰ > Calculator
- ☰ > Exchange Rate

News and Entertainment



Mobile Internet



The Web micro-browser lets you access Web pages and Web-based applications (such as on-line banking, shopping, and games) on your phone. Contact your service provider to set up access, if necessary.

Setting Up Your Phone for Mobile Internet Access

You can adjust the mobile Internet network connection settings, or create a new network connection profile:


Find the Feature  > Web Sessions
> [New Entry]

Starting a Mobile Internet Session



To open the Web micro-browser:

Find the Feature  > Browser

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

Do This	To
Press  up or down	scroll through a page



Do This	To
Press  left or right	go back to the previous page or forward to the next one
Press 	open the Browser Menu

Downloading Pictures, Games, and Sounds

You can download a file such as a ring tone, wallpaper, screensaver, MotoMixer file, or theme to your phone. You can find files at www.hellomoto.com and possibly your carrier's site or other sites. To download files with the browser on a desktop computer or your phone:

Downloading a File Using a Web Browser

- 1** In the browser, go to the Web site (such as www.hellomoto.com) and find the file you want.
- 2** Follow the directions on the site to purchase the file (payment details vary). The site sends a text message to your phone, containing the attached file or a URL link to the file.
- 3** Open the message and store the file (see "Receiving and Reading Messages" on page 44).

Notes:

- Call charges apply during download sessions.
- When your phone runs out of memory for downloaded files, new files overwrite the old ones. Downloaded files share your phone's memory, so you can make room for a picture, for example, by deleting ring tones.



Assigning Phone Themes

In addition to downloading an individual screen saver, wallpaper, or ring tones, you can download all three in a bundle, with a theme such as a special event or a cartoon character.

To download a theme, see “Downloading Pictures, Games, and Sounds” on page 61. When you receive the theme, you can instantly apply its screen saver, wallpaper, and ring tone when your phone prompts you to **Apply Now?**

Your phone saves the downloaded files so that you can always apply them as described in “Setting Up Your Phone” on page 28.

Games

Your phone comes with three games. If you get an incoming call, message, alarm or alert, the game pauses.


Note: You can purchase and download upgraded games from www.hellomoto.com and possibly your carrier's site or other sites.

Find the Feature  > **Games** > *the game*

When the game is over, you can play another session of the same game or return to the games menu.

Astrosmash

In Astrosmash, your job as Commander is to repel an attack of meteors and spinning bombs. You try to shoot as many meteors, bombs, missiles, and flying saucers as

possible without getting hit. Use  to direct your ship. Firing is automatic.

Level One: 1000 point limit

Item	Points	Item	Points
Big Rock	10	Guided Missile	50
Small Rock	20	Small Spinner	80
Big Spinner	40		



Game upgrades remove point limits and add UFOs (100 points) and Hyperspace.





MotoGP

In this game, you are a MotoGP motorcycle racer. Use  to accelerate, brake, and turn your motorcycle.

Level One: “Quick Race”, with one lap and one racer

Game upgrades include other racers and tracks, with “Time Attack” (a time trial with yourself only), and “Grand Prix” (a series of 3 races with other competitors). You can choose a team and a track.

Snood 21

In this solitaire game, you try to use all the cards in a deck by making combinations of 21 on any of four columns. When a combination of 21 is created, the cards are discarded, letting you start another combination of 21. Use    and  to place cards on columns one through four.

Level One: 32 cards, with a one-minute time limit

Game upgrades include more rounds and time limits.



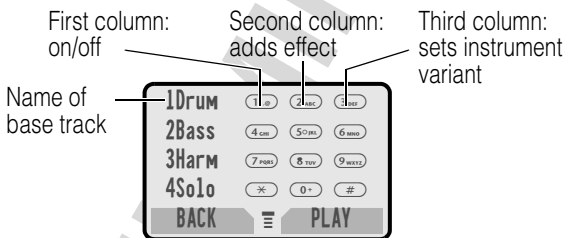
MotoMix Sound Editor

The MotoMixer lets you edit and save special MIDI-based sound files in your phone. These sound files include one or more “base tracks,” plus extra tracks such as “DRUM”, “BASS”, and “SOLO”. To create or edit a MotoMix file:

Find the Feature

☰ > Media Center
> MotoMix > [New Mix]
or a tune to edit

Select and name the tracks you want in the Mix. Turn instruments on or off, add effects or pick an instrument variant using your phone's keypad.



Note: To download new MotoMix files, see “Downloading Pictures, Games, and Sounds” on page 61.

Creating Alert Tones

The My Tones feature lets you create up to 32 custom alert tones for your phone. The tones you create appear in the

list of available alerts (see “Choosing Alert and Ring Tones” on page 29).

Find the Feature

- ☰ > Ring Styles
- > My Tones
- > [New Tone]



To create a new tone, use the keypad keys to enter each note. Press a key multiple times to cycle through its available notes or options (pitch, octave, or length). The default setting for a new tone is a quarter note in octave two.

Key	Displays	Description
1	1, 2, 3	set octave one, two, or three
2 ABC	A, B, C, 2	note A, B, C, or set octave 2
3 DEF	D, E, F, 3	note D, E, F, or set octave 3
4 GHI	G, R	note G or rest
7 PQRS	#, b	sharp or flat
0*	q, h, w	quarter, half, whole note/rest
		move cursor left or right

SIM Applications



You can access information and applications stored on your SIM card.

To access the available applications:

Find the Feature

- ☰ > SIM Applications

Note: To download new applications, see “Downloading Pictures, Games, and Sounds” on page 61.

Specific Absorption Rate Data

The Motorola C330 wireless phone meets 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 limits for exposure to radio frequency (RF) energy set by the Federal Communications Commission (FCC) of the U.S. Government and by Health Canada for Canada. 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 or 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 and by Health Canada is 1.6 W/kg.¹ Tests for SAR are conducted using standard operating positions accepted by the FCC and by Industry Canada 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, the lower the power output.

Before a phone model is available for sale to the public in the U.S. and Canada, it must be tested and certified to the FCC and Industry Canada that it does not exceed the limit established by each government for safe

exposure. The tests are performed in positions and locations (e.g., at the ear and worn on the body) reported to the FCC and available for review by Industry Canada. The highest SAR value for this model phone when tested for use at the ear is ____ W/kg, and when worn on the body, as described in this user guide, is ____ W/kg. (Body-worn measurements differ among phone models, depending upon available accessories and regulatory requirements).²

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

Additional information on Specific Absorption Rates (SAR) can be found on the Cellular Telecommunications & Internet Association (CTIA) Web site:

<http://phonefacts.net>

or the Canadian Wireless Telecommunications Association (CWTA) Web site:

<http://www.cwta.ca>

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 includes the Motorola testing protocol, assessment procedure, and measurement uncertainty range for this product.

ITC02-155

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 radio frequency energy (i.e., radio frequency radiation) in the microwave range while being used. They also emit very low levels of radio frequency 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.

When 20 types of glioma were considered separately, however, an association was found between mobile phone use and one rare type of glioma, neuroepitheliomatous 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

- 2 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

- 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
- 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 radio frequency 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 Web sites:

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/>

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.

ITC00-010

PRELIMINARY

Motorola Limited Warranty for the United States and Canada

What Does this Warranty Cover?

Subject to the exclusions contained below, Motorola, Inc. warrants its telephones, pagers, and consumer and professional two-way radios (excluding commercial, government or industrial radios) that operate via Family Radio Service or General Mobile Radio Service, Motorola-branded or certified accessories sold for use with these Products (“Accessories”) and Motorola software contained on CD-ROMs or other tangible media and sold for use with these Products (“Software”) to be free from defects in materials and workmanship under normal consumer usage for the period(s) outlined below. This limited warranty is a consumer’s exclusive remedy, and applies as follows to new Motorola Products, Accessories and Software purchased by consumers in the United States or Canada, which are accompanied by this written warranty:

Products and Accessories

Products Covered	Length of Coverage
Products and Accessories as defined above, unless otherwise provided for below.	One (1) year from the date of purchase by the first consumer purchaser of the product unless otherwise provided for below.
Decorative Accessories and Cases. Decorative covers, bezels, PhoneWrap™ covers and cases.	Limited lifetime warranty for the lifetime of ownership by the first consumer purchaser of the product.
Monaural Headsets. Ear buds and boom headsets that transmit mono sound through a wired connection.	Limited lifetime warranty for the lifetime of ownership by the first consumer purchaser of the product.

Products Covered	Length of Coverage
Consumer and Professional Two-Way Radio Accessories.	Ninety (90) days from the date of purchase by the first consumer purchaser of the product.
Products and Accessories that are Repaired or Replaced.	The balance of the original warranty or for ninety (90) days from the date returned to the consumer, whichever is longer.

Exclusions

Normal Wear and Tear. Periodic maintenance, repair and replacement of parts due to normal wear and tear are excluded from coverage.

Batteries. Only batteries whose fully charged capacity falls below 80% of their rated capacity and batteries that leak are covered by this limited warranty.

Abuse & Misuse. Defects or damage that result from: (a) improper operation, storage, misuse or abuse, accident or neglect, such as physical damage (cracks, scratches, etc.) to the surface of the product resulting from misuse; (b) contact with liquid, water, rain, extreme humidity or heavy perspiration, sand, dirt or the like, extreme heat, or food; (c) use of the Products or Accessories for commercial purposes or subjecting the Product or Accessory to abnormal usage or conditions; or (d) other acts which are not the fault of Motorola, are excluded from coverage.

Use of Non-Motorola Products and Accessories. Defects or damage that result from the use of Non-Motorola branded or certified Products, Accessories, Software or other peripheral equipment are excluded from coverage.

Unauthorized Service or Modification. Defects or damages resulting from service, testing, adjustment, installation, maintenance, alteration, or modification in any way by someone other than Motorola, or its authorized service centers, are excluded from coverage.

Altered Products. Products or Accessories with (a) serial numbers or date tags that have been removed, altered or obliterated; (b) broken seals or that show evidence of tampering; (c) mismatched board serial numbers; or (d) nonconforming or non-Motorola housings, or parts, are excluded from coverage.

Communication Services. Defects, damages, or the failure of Products, Accessories or Software due to any communication service or signal you may subscribe to or use with the Products Accessories or Software is excluded from coverage.

Software

Products Covered	Length of Coverage
Software. Applies only to physical defects in the media that embodies the copy of the software (e.g. CD-ROM, or floppy disk).	Ninety (90) days from the date of purchase.

Exclusions

Software Embodied in Physical Media. No warranty is made that the software will meet your requirements or will work in combination with any hardware or software applications provided by third parties, that the operation of the software products will be uninterrupted or error free, or that all defects in the software products will be corrected.

Software NOT Embodied in Physical Media. Software that is not embodied in physical media (e.g. software that is downloaded from the internet), is provided “as is” and without warranty.

Who is Covered?

This warranty extends only to the first consumer purchaser, and is not transferable.

What Will Motorola Do?

Motorola, at its option, will at no charge repair, replace or refund the purchase price of any Products, Accessories or Software that does not conform to this warranty. We may use functionally equivalent

reconditioned/refurbished/pre-owned or new Products, Accessories or parts. No data, software or applications added to your Product, Accessory or Software, including but not limited to personal contacts, games and ringer tones, will be reinstalled. To avoid losing such data, software and applications please create a back up prior to requesting service.

How to Obtain Warranty Service or Other Information?

USA	Phones 1-800-331-6456 Two-Way Radios 1-800-353-2729 Pagers 1-800-548-9954
Canada	All Products 1-800-461-4575
TTY	1-888-390-6456
For Accessories and Software , please call the telephone number designated above for the product with which they are used.	

You will receive instructions on how to ship the Products, Accessories or Software, at your expense, to a Motorola Authorized Repair Center. To obtain service, you must include: (a) a copy of your receipt, bill of sale or other comparable proof of purchase; (b) a written description of the problem; (c) the name of your service provider, if applicable; (d) the name and location of the installation facility (if applicable) and, most importantly; (e) your address and telephone number.

What Other Limitations Are There?

ANY IMPLIED WARRANTIES, INCLUDING WITHOUT LIMITATION THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, SHALL BE LIMITED TO THE DURATION OF THIS LIMITED WARRANTY, OTHERWISE THE REPAIR, REPLACEMENT, OR REFUND AS PROVIDED UNDER THIS EXPRESS LIMITED WARRANTY IS THE EXCLUSIVE REMEDY OF THE CONSUMER, AND IS PROVIDED IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OF IMPLIED. IN NO EVENT SHALL MOTOROLA BE LIABLE, WHETHER IN CONTRACT OR TORT

(INCLUDING NEGLIGENCE) FOR DAMAGES IN EXCESS OF THE PURCHASE PRICE OF THE PRODUCT, ACCESSORY OR SOFTWARE, OR FOR ANY INDIRECT, INCIDENTAL, SPECIAL OR CONSEQUENTIAL DAMAGES OF ANY KIND, OR LOSS OF REVENUE OR PROFITS, LOSS OF BUSINESS, LOSS OF INFORMATION OR DATA, SOFTWARE OR APPLICATIONS OR OTHER FINANCIAL LOSS ARISING OUT OF OR IN CONNECTION WITH THE ABILITY OR INABILITY TO USE THE PRODUCTS, ACCESSORIES OR SOFTWARE TO THE FULL EXTENT THESE DAMAGES MAY BE DISCLAIMED BY LAW.

Some states and jurisdictions do not allow the limitation or exclusion of incidental or consequential damages, or limitation on the length of an implied warranty, so the above limitations or exclusions may not apply to you. This warranty gives you specific legal rights, and you may also have other rights that vary from state to state or from one jurisdiction to another.

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ITC02-159

Product Registration

Online Product Registration:

<http://www.motorola.com/warranty>

Product registration is an important step toward enjoying your new Motorola product. Registering helps us facilitate warranty service, and permits us to contact you should your product require an update or other service. Registration is for U.S. residents only and is not required for warranty coverage.

Please retain your original dated sales receipt for your records. For warranty service of your Motorola Personal Communications Product you will need to provide a copy of your dated sales receipt to confirm warranty status.

Thank you for choosing a Motorola product.

Export Law Assurances

This product is controlled under the export regulations of the United States of America and Canada. The Governments of the United States of America and Canada may restrict the exportation or re-exportation of this product to certain destinations. For further information contact the U.S. Department of Commerce or the Canadian Department of Foreign Affairs and International Trade.

PRELIMINARY



MOTOROLA

Wireless Phone 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 the 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:

- 1 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.



- 2 **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.
- 3 **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.
- 4 **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.
- 5 **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.
- 6 **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.
- 7 **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.



- 8 **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.*
- 9 **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.*
- 10 **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.*

* Wherever wireless phone service is available.

Check the laws and regulations on the use of wireless telephones and their accessories in the areas where you drive. Always obey them. The use of these devices may be prohibited or restricted in certain areas.



PRELIMINARY

For more information,
please call
1-888-901-SAFE
or visit the
CTIA Web site at
www.wow-com.comTM

