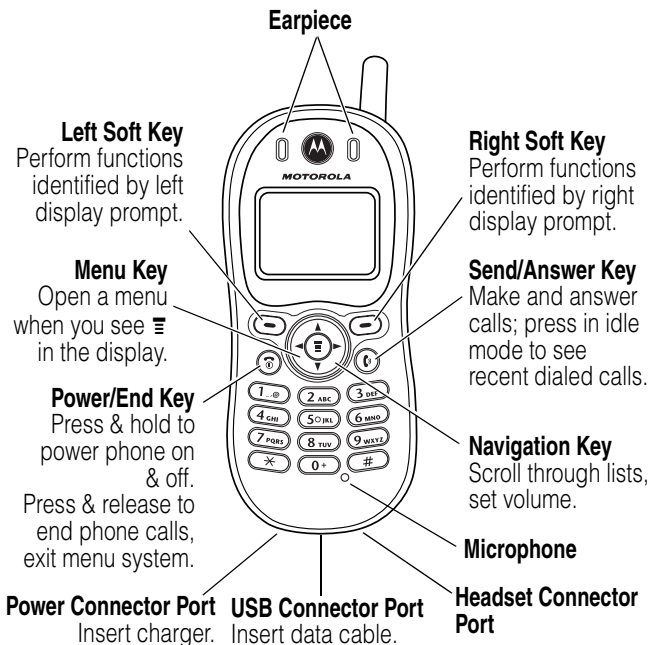# *Welcome*

Welcome to the world of Motorola digital wireless communications! We are pleased that you have chosen the Motorola C332T TDMA wireless phone.

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 mode 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

Power Connector Port
Insert charger.

USB Connector Port
Insert data cable.

Headset Connector Port

You can change your phone's covers and keypads (see "Assembling Your Phone" on page 13). 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 covers.

Contents

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 824 MHz to 849 MHz in analog and digital mode and 1851 MHz to 1909 MHz in digital mode.

When you communicate with your phone, the system handling your call controls the power levels at which your phone transmits. The output power level typically may vary over a range from 0.0 Watts to 0.43 Watts in analog mode and 0.0 Watts to 0.40 Watts in digital mode.

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 centimeters) 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 your 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 OFF the phone 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 the phone is a model specifically identified as being "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.
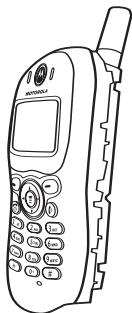
Getting Started

What's in the Box?

Your phone is partially assembled when shipped.
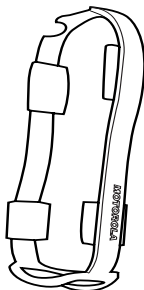
Front Cover & Endoskeleton   **Back Cover**   **Battery**   **Side Band**

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

To purchase Motorola Original™ accessories, 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

This user guide introduces you to your Motorola wireless phone.

> **Note: A reference guide for your phone is also available that describes your phone's features in more detail.**

To obtain the reference guide for your phone, or another copy of this user guide, see the Motorola Web site at:

http://motorola.com/consumer/manuals

or contact the Motorola Customer Call Center at 1-800-331-6456 in the United States or 1-800-461-4575 in Canada.

Optional Features

This label identifies an optional network or subscription-dependent feature that may not be offered by all service providers in all geographical areas. Contact your service provider for more information.

Optional Accessories

This label identifies a feature that requires an optional Motorola Original™ accessory.
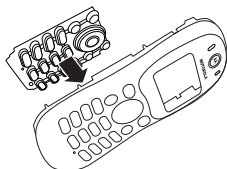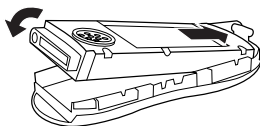
Assembling Your Phone

To assemble your phone:

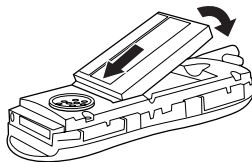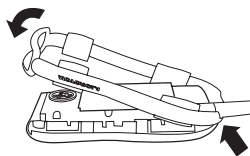|	**Action**
1	If necessary, fit the keypad into the front cover. **Note:** Skip steps 1 and 2 if assembling your phone for the first time.
2	Install the phone endoskeleton into the front cover.
3	Fit the end of the battery with the gold contacts into the bottom end of the battery compartment. (The contacts should face down.) Then push the battery down until it snaps into place.
4	Hook the notched end of the side band beneath the phone antenna, then push the band down and snap it into place.

5 Attach the bottom end of the back cover, then push the top end downward until it latches.
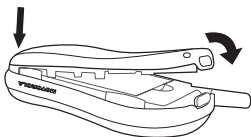
6 If you installed a new battery, you need to charge it before you can use your phone. See "Charging the Battery" on page 15.

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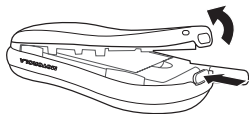
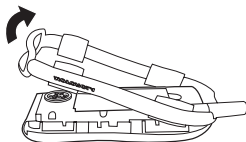## Taking Your Phone Apart

To disassemble your phone:

Action

1 Remove the back cover from the phone.

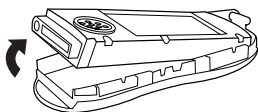Press the tab at the top of the phone, then lift the cover up and off.

2 Remove the battery.

3 Remove the side band from the phone.

4 Remove the phone
endoskeleton from the
front cover.

  a Push the sides of
  the cover outward
  while lifting up on
  the bottom of the
  endoskeleton.

  b Slide the top of the
  endoskeleton
  downward until the
  complete unit is
  removed from the
  cover.

5 Remove the keypad
from the front cover.

Getting Started
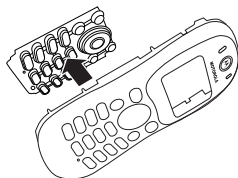
Charging the Battery

Before you can use your phone, you must fully charge the
battery, as indicated by the following instructions. Some
batteries perform best after several full charge/discharge
cycles.

	Action
1	Plug the travel charger into your phone with the release tab facing up.

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.

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 22.

Replacing the Battery

Your phone is designed to be used only with Motorola Original batteries and accessories. We recommend that you store batteries in their protective cases when not in use.

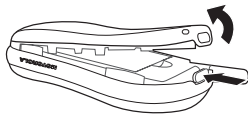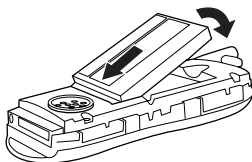|	**Action**
1	If necessary, remove the back cover from the phone.
	Press the tab at the top of the phone, then lift the cover up and off the phone.
2	Remove the battery.
3	Install the replacement battery.
	Fit the end of the battery with the gold contacts into the bottom end of the battery compartment. (The contacts should face down.)
	Then push the battery down until it snaps into place.
4	Attach the bottom end of the back cover, then push the top end downward until it latches.

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 batteries or batteries that have been stored for long periods of time may require a longer initial charge time.

- Maintain the battery at or near room temperature when charging.

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

Extending Battery Life

- **Minimize keypad-intense functions**
  Activities that require intensive keystroke use (such as playing a game or using messaging) reduce your phone's talk and standby time. Lock the keypad when storing the phone in your purse or pocket to avoid unnecessary keypad and backlight activations. See page 37.

- **Turn off the display backlight**
  See page 40.

Turning Your Phone On

	Action
1	Press and hold ⊚ (the End/Power key).
2	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 34.)

Note: At startup, you are given the option to personalize your phone. Select **YES** (⊝) to set personal phone options. Select **NO** (⊝) to proceed to the idle display. For more information, see "Personalizing Features" on page 53.

Adjusting the Volume

Press right and left on the ⊙ to:

- increase and decrease earpiece volume during a call

- increase and decrease the ringer volume setting when the idle display is visible

  Tip: At the lowest volume setting, press ⊙ left to switch to vibrate alert, then silent alert. Press right to reset ring alert.

- turn off an incoming call alert

Making a Call

Do not block the antenna while you are on a call.

	Press	To
1	keypad keys	dial the phone number
		Tip: If you make a mistake, press **DELETE** ($\bigcirc$) to delete the last digit, or press and hold **DELETE** ($\bigcirc$) to clear all digits.
2	$\copyright$	make the call
3	$\circledS$	end the call and "hang up" the phone when you are finished

Answering a Call

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

	Press	To
1	$\copyright$ or **ANSWER** ($\bigcirc$)	answer the call
2	$\circledS$	end the call and "hang up" the phone when you are finished

Note: If the phone is locked, you must unlock it to answer the call.

Viewing Your Phone Number
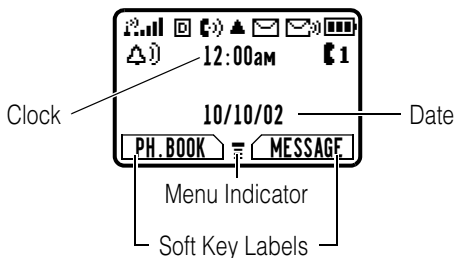
While you are on a call, press ⊜ > **My Tel. Number**.

Learning to Use Your Phone

See page 1 for a basic phone diagram.

Using the Display

The idle display (shown below) is the standard display you see when you are *not* on a call or using the menu.

Clock ——
Date ——
Menu Indicator
Soft Key Labels

The ≡ (menu) indicator at the bottom center of the display indicates you can press the menu key (≡) to go to the main menu to see more features.

Labels at the bottom corners of the display show the current soft key functions. Press the left soft key (◖) or right soft key (◗) to perform the function indicated by the left or right soft key label.

At the top of the display are the following status indicators:

3 In Use **4** Roam **5** Message Waiting **6** Voice Message Waiting

2 Digital/Analog Signal

1 Signal Strength

7 Battery Level

```
Ĩ.ull  回  (·)  ▲  ⬚  ⬚⬚  ▥▥▥
▵)    12:00ᴀᴍ
      10/10/02
PH.BOOK  ☰  MESSAGE
```

8 Ring Style
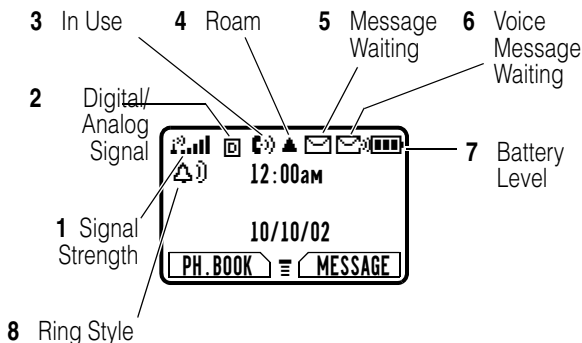
1 Signal Strength Indicator Vertical bars show the strength of the network connection. You cannot make or receive calls when the ⊖ (no signal) indicator is displayed.

2 Digital (回) or Analog (◱) Signal Indicator Shows whether you are receiving a digital or analog signal.

3 In Use Indicator Shows that a call is in progress.

4 Roam Indicator Shows that your phone is seeking or using another network system outside your home network.

5 Message Waiting Indicator Appears when you receive a text message.

Learning to Use Your Phone

6 Voice Message Waiting Indicator Appears when you receive a voicemail message.

7 Battery Level Indicator Vertical bars show the battery charge level. Recharge the battery when you see `Low Battery` and hear the low battery alert.

8 Ring Style Indicator Shows the ring style setting.

$\triangle$) = loud	$\triangle$» = soft
░░ = vibrate	$\rangle$$\triangle$ = vibrate and ring
$\triangle^z_z$ = silent	

Using the 4-Way Navigation Key

Use the 4-way navigation key like a joystick to navigate the menu system, change feature settings, and play games.

4-way navigation key
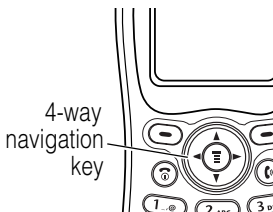
Tip: Down and up are your primary movements within menus. Move left and right to change feature settings, navigate the datebook, and edit text.

Using Menus

From the idle display, press $\circledcirc$ to go to the main menu.

Select a Menu Feature

This guide shows you how to select a menu feature as follows, starting from the idle display:

Find the Feature   ⊜ > Messages > Inbox

This example shows that from the idle display, you must press ⊜, scroll to and select **Messages** from the main menu, then scroll to and select **Inbox**. Use ⊙ to scroll, and the left/right soft keys to select the functions listed in the bottom left and right corners of the display.

Select a Feature Option

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

Press
BACK (⊖)
to return to
previous
screen.

```
┌─────────────────────┐
│ 𝕩.ıll          ▥▥▥  │
│    Dialed Calls     │
│ 10) John Smith      │
│ 9) Mary Smith       │
│  BACK   ≣   VIEW    │
└─────────────────────┘
```

Highlighted
item

Press
VIEW (⊖)
to view details
of highlighted
item.

Press ⊜ to open sub-menu.
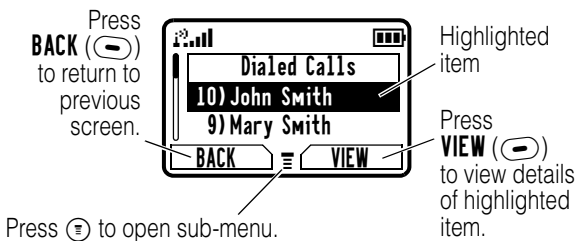
- Press ⊙ to scroll up or down to highlight an item.

- 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.

Enter Feature Information

Some features require you to enter information:

Press $\oplus$ to scroll down to other items.

Entry Details
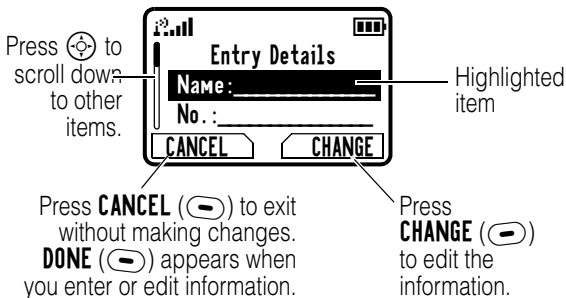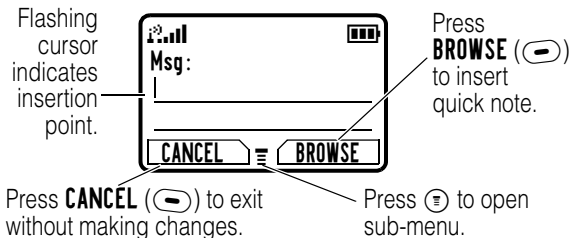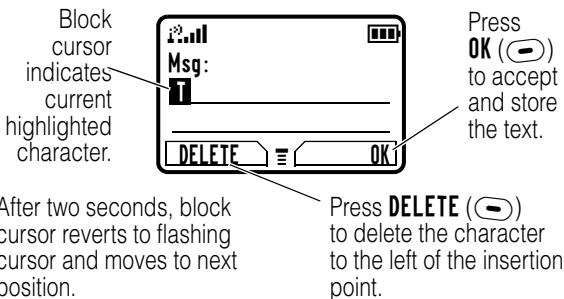**Name:** _____ — Highlighted item
No.: _____
CANCEL   CHANGE

Press **CANCEL** ($\bigcirc$) to exit without making changes. **DONE** ($\bigcirc$) appears when you enter or edit information.

Press **CHANGE** ($\bigcirc$) to edit the information.

- Enter numbers or text with the keypad.
- When an item has a list of possible values, press $\circledast$ or $\circledcirc$ to scroll through and select a value.
- When an item has a list of possible numeric values, press a number key to set the value.
- If you enter or edit information and do not want to save your changes, press $\circledcirc$ to exit without saving.

The message center lets you compose and send text messages. A flashing cursor shows where text will appear:

Flashing cursor indicates insertion point.

Msg:
CANCEL ≡ BROWSE

Press **BROWSE** ($\bigcirc$) to insert quick note.

Press $\circledcirc$ to open sub-menu.

Press **CANCEL** ($\bigcirc$) to exit without making changes.

Learning to Use Your Phone

When you enter text using the standard tap method (see page 28), the flashing cursor changes to a *block cursor*, and the soft key functions change:

Block cursor indicates current highlighted character.

Press **OK** (⊝) to accept and store the text.

After two seconds, block cursor reverts to flashing cursor and moves to next position.

Press **DELETE** (⊝) to delete the character to the left of the insertion point.

Entering Text

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

Choose a Text Mode

Press ⊜ from any text entry screen to select a text mode:

iTAP   Let the phone predict each word as you enter it. See page 29.

Tap Method Enter letters, numbers, and symbols by pressing a key one or more times. See page 28.

Numeric   Enter numbers only.

Symbol   Enter symbols only. See page 33.

Browse   Browse your phonebook or recent call lists to select a name or number.

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

Use Tap Method

This is the standard mode for entering text on your phone.

Press ⊙ from any text entry screen and select the Tap Method menu option.

	Press	To
1	A number key one or more times	select a letter, number, or symbol shown in the "Character Chart" on page 29
2	Number keys	enter the remaining characters
3	OK (⊙)	store the text when you are finished

General Text Entry Rules

Press a number key repeatedly to cycle through its characters. See the "Character Chart" on page 29.

- 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 every sentence is capitalized. (Press ⊙ down to force the character to lowercase while it is highlighted by the block cursor).

- Your phone may support multiple languages. You can switch languages within a message. Press ⊙ to select the text mode and language you want to use.

Character Chart

Use this chart as a guide for entering characters with the tap method.

⒈	*space* . 1 ? ! , @ _ & ~ : ; " - ( ) ' ¿ ¡ % £ $ ¥ ¤ €
②ᴬᴮᶜ	a b c 2 ä å á à â ã α β ç
③ᴰᴱᶠ	d e f 3 δ ë é è ê ε φ
④ᴳᴴᴵ	g h i 4 ï í î γ η ι
⑤ᴶᴷᴸ	j k l 5 κ λ
⑥ᴹᴺᴼ	m n o 6 ñ ö ø ó ò ô õ μ υ ω
⑦ᴾ�QᴿˢS	p q r s 7 π ß σ
⑧ᵀᵁⱽ	t u v 8 θ ü ú ù û τ
⑨ᵂˣʸᶻ	w x y z 9 ξ ψ
⓪	+ - 0 x * / \ [ ] = > < # §

Note: This chart may not reflect the exact character set available on your phone.

Use iTAP™ Software Predictive Text Entry Method

iTAP™ software is a predictive text entry method that lets you enter a word using one keypress per letter.

Press ⓔ from any text entry screen and select the **iTAP** menu option.

Note: You can switch languages within a message in iTAP text mode. Press ⓔ to select the language you want to use.

Entering Words

	Action
1	Press a number key one time to enter the first letter of the word.
	The letters associated with the key are shown at the bottom of the display.
2	Press number keys (one per letter) to enter the rest of the word.
	Alternative words and letter combinations are shown at the bottom of the display. The word choices are updated with each keypress.
3	Press $\hat{\diamond}$ to highlight the word you want.
4	Press **SELECT** ($\frown$) to enter the word at the flashing cursor location.
	A space is automatically inserted after the word.

For example, to spell the word "art," press (2_{ABC}) (7_{PQRS}) (8_{TUV}). The display shows:

Flashing cursor indicates insertion point.

Press **DELETE** ($\frown$) to clear last letter.

Press $\hat{\diamond}$ to scroll and see additional word choices.

Press **SELECT** ($\frown$) to insert highlighted word.
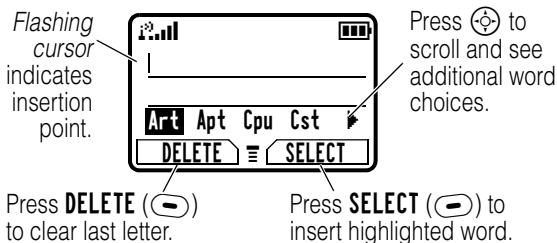
Entering Novel Words

You may enter a word that the iTAP software does not recognize. If the word you want is not displayed:

Action
1 Press **DELETE** (⊝) one or more times to delete letters until you see a letter combination that matches the start of the word.
2 Press ⊙ left or right to highlight the letter or letter combination.
3 Press **SELECT** (⊝), then press ⊙ to the left to shift the text entry cursor to the left and "lock" the selected word portion.
4 Continue to enter letters and highlight letter combinations to spell the word.

Entering Punctuation

Press	To
⓪⁺ or ①●	enter punctuation or other characters as shown in the "Character Chart" on page 29

Using Capitalization

The first word of a sentence is automatically capitalized, with following words in lowercase.

Press	To
⊕ up or down	change the words to initial character capitalized, all uppercase characters, or all lowercase characters

Entering Numbers

Action
1 Enter the first digit and then highlight it to put the iTAP software in number entry mode.
2 Press number keys to add digits to the number.
3 Press SELECT (⊝) to enter the number at the flashing cursor location.

Deleting Letters and Words

Place the cursor to the right of the text you want to delete, and then do the following:

Action
Press DELETE (⊝) to delete one letter at a time.
Hold DELETE (⊝) to delete the entire message.

Use Symbol Text Entry Method

Your phone provides an alternate way to enter symbol characters in a message. Press ⊜from any text entry screen and select the **Symbol** menu option.

	Press	**To**
1	a number key one time	display its symbol options at the bottom of the display
		See the "Symbol Chart" on page 33.
2	⊙	highlight the symbol you want
	or	
	number key multiple times	
3	SELECT (⊖)	enter the symbol at the flashing cursor location

Symbol Chart

Use this chart as a guide for entering characters in symbol mode.

①⊙	*space* . ? ! , @ _ & ~ : ; " - ( ) ' ¿ ¡ % £ $ ¥ ¤ €
②ABC	@ _ \ α β
③DEF	/ : ; δ φ
④GHI	" & ' ∨
⑤JKL	( ) [ ] { } λ
⑥MNO	¿ ¡ ~ ω

Learning to Use Your Phone

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(7_{PQRS})	< > = π β σ
(8_{TUV})	$ £ ¥ ¤ €
(9_{WXYZ})	# % * ξ ψ
(0^+)	+ - x * / = > < # §

Note: This chart may not reflect the exact character set available on your phone.

Locking and Unlocking Your Phone

You can lock your phone manually or set the phone to lock automatically whenever you turn it off.

To use a locked phone, you must enter the unlock code. A locked phone still rings or vibrates for incoming calls or messages, but you must unlock it to answer.

You can make emergency calls on your phone even when it is locked. For more information, see page 42.

Locking Your Phone Manually

Find the Feature $(≡)$ > Settings > Security
> Phone Lock
> Lock Now

	Press	To
1	keypad keys	enter your unlock code
2	OK ($\ominus$)	lock the phone

Learning to Use Your Phone

Unlocking Your Phone

Tip: Your phone's unlock code is originally set to 1234 at the factory. Many service providers reset the unlock code to the last four digits of your phone number.

At the `Enter Unlock Code` prompt:

	Press	To
1	keypad keys	enter your unlock code
2	OK ($\ominus$)	unlock your phone

Setting Your Phone to Lock Automatically

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

Find the Feature $\quad$ $\textcircled{=}$ > Settings > Security
                      $\quad$ > Phone Lock
                      $\quad$ > Automatic Lock > On

	Press	To
1	keypad keys	enter your unlock code
2	OK ($\ominus$)	activate automatic lock

Changing a Code or Password

Your phone's four-digit unlock code is originally set to 1234, and the six-digit security code is originally set to 000000 at the factory. 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. The unlock code must contain four digits, and the security code must contain six digits.

Notes:

- Your service provider may retain your phone's security code for customer service purposes. In this case, you will not be able to use phone features that require you to enter the security code.

- If the unlock code is the only code you can change, the **New Passwords** menu is not available. In this case, change the unlock code by selecting $\odot$ > **Settings** > **Security** > **Phone Lock** > **Unlock Code**.

To change a code or password:

Find the Feature $\odot$ > **Settings** > **Security** > **New Passwords**

If You Forget a Code or Password

If you forget your security code, contact your service provider.

If you forget your unlock code, try entering 1234 or the last four digits of your phone number. If that does not work, do the following at the **Enter Unlock Code** prompt:

	Press	To
1	$\odot$	go to the unlock code bypass screen
2	keypad keys	enter your security code

Press	To
3 OK ($\bigcirc$)	submit your security code

Locking and Unlocking the Keypad

You can lock your phone keypad to prevent accidental key presses (for example, when carrying your phone in a purse or pocket).

Press	To
$\textcircled{\scriptsize{$\equiv$}}$ $\textcircled{\scriptsize{$\ast$}}$	lock or unlock your keypad

Note: Incoming calls and messages unlock the keypad.

Setting Up Your Phone

Storing Your Name and Phone Number

To store or edit user name and phone number information on your phone:

Find the Feature   ( ) > Settings
> Phone Status
> My Tel. Number

Setting the Time and Date

You must set the time and date to use the datebook.

Find the Feature   ( ) > Settings
> Other Settings
> Initial Setup
> Time and Date

Setting a Ring Style

Your phone rings or vibrates to notify you of an incoming call or other event. This ring or vibration is called an alert.

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

$\triangle \mathfrak{d}$ = loud		$\triangle \mathfrak{v}$ = soft
$\mathfrak{d}\mathfrak{d}\mathfrak{d}$ = vibrate		$\mathfrak{d}\triangle$ = vibrate and ring
$\triangle^{\mathfrak{z}}_{\mathfrak{z}}$ = silent		

The ring style indicator in the display shows the current ring style (see page 23).

To set a ring style:

Find the Feature   ⊜ > Ring Styles > Style

Press	To
1 ⊙	scroll to the ring style
2 SELECT (⊝)	select the ring style

Each ring style contains settings for specific event alerts, ringer ID, and ringer and keypad volume. To change these settings, press ⊜ > Ring Styles > *Style* Detail.

Setting Answer Options

You can use different methods to answer an incoming call.

Find the Feature   ⊜ > Settings
                    > In-Call Setup
                    > Answer Options

The Answer Options menu includes:

Multi-Key   answer by pressing any key

Zooming In and Out

Press and release $\textcircled{\scriptsize =}$, then press and hold $\textcircled{\scriptsize =}$ to zoom in and out on the display. Zoom in to increase text size, zoom out to display more information.

You can also zoom in and out from the menu:

Find the Feature $\textcircled{\scriptsize =}$ > Settings
> Other Settings
> Initial Setup > Zoom

Setting Display Contrast

Find the Feature $\textcircled{\scriptsize =}$ > Settings
> Other Settings
> Initial Setup
> Contrast

Adjusting the Backlight

You can set the amount of time that the display backlight remains on, or turn off the backlight to conserve battery power.

Find the Feature $\textcircled{\scriptsize =}$ > Settings
> Other Settings
> Initial Setup
> Backlight

Calling Features

For basic instructions on how to make and answer calls, see page 20.

Redialing a Number

If you hear an ordinary busy signal:

	Press	**To**
1	⊚	hang up
2	ⓒ	redial the busy number

Using Caller ID

Calling line identification (caller ID) displays the phone number for incoming calls.

The phone displays the caller's name when the name is stored in your phonebook, or

Incoming Call when caller ID information is not available.

Using Voice Privacy

When *voice privacy* is activated, your phone always tries to use a high-security connection to prevent others from intercepting your calls.

When a high-security connection is available, your phone uses it and displays the ᵗᵛP (voice privacy) indicator during a call.

Calling Features

Canceling an Incoming Call

While the phone is ringing or vibrating:

Press	To
⊙ or IGNORE (⊖)	cancel the incoming call

Depending on your phone settings and/or service subscription, the call may be forwarded to another number, or the caller may hear a busy signal.

Turning Off a Call Alert

You can turn off your phone's incoming call alert before answering the call.

Press	To
⊙ left or right	turn off the alert

Calling an Emergency Number

Your service provider programs one or more emergency phone numbers, such as 911, that you can call under any circumstances, even when your phone is locked.

Note: Emergency numbers vary by country. Your phone's preprogrammed emergency number(s) may not work in all locations, and sometimes an emergency call cannot be

placed due to network, environmental, or interference issues.

	Press	To
1	keypad keys	dial the emergency number
2	⒞	call the emergency number

Viewing Recent Calls

Your phone keeps a list of the calls you recently received and dialed, even if the calls did not connect. The lists are sorted from newest to oldest entries. The oldest entries are deleted as new ones are added.

Shortcut: Press ⒞ to go directly to the dialed calls list from the idle display.

Find the Feature   ⒨ > Recent Calls

	Press	To
1	⌖	scroll to **Received Calls** or **Dialed Calls**
2	SELECT (⊝)	select the list
3	⌖	scroll to an entry
		Note: ✓ means the call connected.

	Press	**To**
4	$\circledcirc$	call the entry's number **Tip:** Press and hold $\circledcirc$ for two seconds to send the number as DTMF tones during a call.
	or	
	VIEW ($\ominus$)	view entry details
	or	
	$\circledcirc$	open the Last Calls Menu to perform other procedures as described in the following list

The Last Calls Menu can include the following options:

Option	Description
Store	Create a phonebook entry with the number in the No. field.
Delete	Delete the entry.
Delete All	Delete all entries in the list.
Send Message	Open a new text message with the number in the To field.
Add Digits	Add digits after the number.
Attach Number	Attach a number from the phonebook or recent call lists, after the highlighted number.

Option	Description
Send Tones	Send the number to the network as DTMF tones.
	Note: This option appears only during a call.

Returning an Unanswered Call

Your phone keeps a record of your unanswered calls, and displays:

- the (missed call) indicator
- X Missed Calls Y Unknown, where X is the total number of missed calls and Y is the number of missed calls with no caller ID information

	Press	To
1	VIEW (⌐)	see the received calls list
2	⊙	select a call to return
3	ⓒ	make the call

Using the Notepad

Your phone stores the most recent string of digits entered on the keypad in a temporary memory location called the *notepad*. This can be a phone number that you called, or a number that you entered but did not call. To retrieve the number stored in the notepad:

Find the Feature   ⓔ > Recent Calls
                           > Notepad

Press	To
$\odot$	call the number
or	
$\circledast$	open the **Dialing Menu** to attach a number or insert a special character
or	
STORE ($\ominus$)	create a phonebook entry with the number in the **No.** field

Attaching a Number

While dialing (with digits visible in the display):

Press	To
$\circledast$ > **Attach Number**	attach a number from the phonebook or recent call lists

Calling With Speed Dial

Each entry you store in your phonebook is assigned a unique *speed dial* number. To speed dial a phonebook entry:

	Press	To
1	keypad keys	enter the speed dial number for the entry you want to call
2	$\circledast$	submit the number

Press	**To**
3 $\textcircled{\scriptsize{0}}$	call the entry

Calling With One-Touch Dial

To call phonebook entries 1 through 9, just press and hold the one-digit speed dial number for one second.

We recommend that you reserve phonebook entry 1 (speed dial number 1) for storing and dialing your voicemail number. In many cases, your service provider has already done this for you. If necessary, see page 48 to store your voicemail number for one-touch dial access.

Using Voicemail

Voicemail messages that you receive are stored on the network. To listen to your messages, you must call your voicemail phone number.

Note: Your service provider may include additional information about using this feature.

Listen ing to Voicemail Messages

Find the Feature $\qquad \textcircled{\scriptsize{$\equiv$}} >$ Messages > VoiceMail

The phone calls your voicemail number. If no voicemail number is stored, your phone prompts you to store one.

Shortcut: Your service provider may also store your voicemail phone number as phonebook entry number 1. If so, you can press and hold $\textcircled{\scriptsize{1}}$ to listen to your voicemail message(s).

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Receiving a Voicemail Message

When you receive a voicemail message, your phone displays the ⊠» (voice message waiting) indicator and a **New VoiceMail** notification.

Press	To
CALL (⊂⊃)	listen to the message

The phone calls your voicemail number. If no voicemail number is stored, your phone prompts you to store one.

Storing Your Voicemail Number

If necessary, use the following procedure to store your voicemail phone number. Usually, your service provider has already done this for you.

Find the Feature   ⊜ > **Messages**
                       ⊜ > **VoiceMail Setup**

	Press	To
1	keypad keys	enter your voicemail number
		Tip: You can store your PIN code with the voicemail number.
2	OK (⊂⊃)	store the number

Your service provider additionally may store your voicemail number as phonebook entry number 1, so you can use one-touch dial to listen to your voicemail messages. If necessary, see your reference guide for information on

how to store your voicemail number as a phonebook entry for one-touch dial access.

Muting the Phone

To mute your phone during a call, press **MUTE** (⊖) (if available) or ⊜ > **Mute**.

Using Call Waiting

When you are on a call, an alert tone sounds to indicate that you have received a second call.

	Press	**To**
1	ⓒ	answer the new call
2	ⓒ	switch back to the first call

Calling Features

Phone Features

Main Menu

This is the standard main menu layout. **Menu organization and feature names may vary on your phone.** Not all features may be available for all users.

For example, the **Radio** feature is available only when the optional FM Stereo Radio Headset accessory is plugged into your phone (see phone illustration, page 1).

- **Recent Calls**
  - Received Calls
  - Dialed Calls
  - Notepad
  - Call Times
- **Phonebook**
- **Datebook**
- **Radio**
- **Messages**
  - Create Msg
  - Voicemail
  - Inbox
  - Quick Notes
  - Outbox
  - Drafts
- **Ring Styles**
  - Style
  - *Style* Detail
  - My Tones
- **Shortcuts**
- **Voice Record**
- **Browser**
- **Calculator**
- **Games**
- **Settings**
  (see next page)

Shortcuts
Change display zoom: Press $\equiv$, then press and hold $\equiv$
Change ringer alert: Press $\textcircled{\Phi}$ left to switch to vibrate alert, then silent alert. Press $\textcircled{\Phi}$ right to reset ring alert.
Display my phone number: Press $\equiv$ $\#$
Go to dialed calls list: Press $\textcircled{0}$
Exit menu system: Press $\textcircled{0}$
Open phonebook: Press $\textcircled{\Phi}$ down
Create phonebook entry: Press $\textcircled{\Phi}$ up

Phone Features

Settings Menu

- **Phone Status**
  - My Tel. Number
  - Active Line
  - Battery Meter
  - Other Information
- **Connection**
  - Incoming Call
- **In-Call Setup**
  - In-Call Timer
  - Answer Options
- **Security**
  - Phone Lock
  - Lock Keypad
  - Lock Application
  - Talk Secure
  - Restrict Calls
  - New Passwords

- **Other Settings**
  - Personalize
    - Main Menu
    - Keys
    - Greeting
  - Initial Setup
    - Time and Date
    - Backlight
    - Zoom
    - TTY Setup
    - Scroll
    - Animation
    - Language
    - Battery Save
    - Contrast
    - DTMF
    - Master Reset
    - Master Clear
  - Network
  - Car Settings
  - Headset

Phone Features

Feature Quick Reference

You can do more with your phone than make and receive phone calls! For example, you can store frequently called numbers in the phonebook for easy dialing, organize your meetings and other events in the datebook, browse the Web, download applications, send messages, and more.

This chapter provides information to help you locate features on your phone that are not described in this user guide. For more detailed information, see the reference guide.

Calling Features

Feature	Description	
Three-Way Call	During a call: Dial third party's number, press $\textcircled{0}$ to call, press $\textcircled{0}$ again to connect	Network/Subscription Dependent Feature
Restrict Calls	Restrict outgoing or incoming calls: $\textcircled{=}$ > **Settings** > **Security** > **Restrict Calls**	Network/Subscription Dependent Feature
TTY Calls	Set up your phone for use with an optional TTY device: $\textcircled{=}$ > **Settings** > **Other Settings** > **Initial Setup** > **TTY Setup**	Optional Accessory

Messages

Feature	Description
Send Message	Send a text message: ⬒ > Messages > Create Msg
Receive Message	Read a new text message that you have received: Press READ (⊙)

Phonebook

Feature	Description
Create Entry	Create a new phonebook entry: ⬒ > Phonebook ⬒ > [New Entry]
Dial Number	Call a number stored in the phonebook: ⬒ > Phonebook > *entry to call* ⓒ
Voice Dial Number	Voice dial a number stored in the phonebook: Press and release the voice key, and say the entry's name (within two seconds)

Personalizing Features

Feature	Description
Event Alert	Change an event alert: ⬒ > Ring Styles > *Style* Detail > *event name*

Feature	Description
Ring Volume	Adjust ringer volume: ☰ > Ring Styles > *Style* Detail > Ring Volume
Keypad Volume	Adjust keypad keypress volume: ☰ > Ring Styles > *Style* Detail > Key Volume
My Tones	Compose your own ring tones, manage ring tones that you have composed or downloaded: ☰ > Ring Styles > My Tones
Soft Keys	Change soft key labels and smart key access in the idle display: ☰ > Settings > Other Settings > Personalize > Keys
Shortcuts	Create a shortcut to a menu item: Highlight the menu item, then press and hold ☰ Select a shortcut: ☰ > Shortcuts > *shortcut name*

Menu Features

Feature	Description
Language	Set menu language: ☰ > Settings > Other Settings > Initial Setup > Language

Feature	Description
Master Reset	Reset all options *except* unlock code, security code, lifetime timer: $\text{\textcircled{\scriptsize =}}$ > Settings > Other Settings > Initial Setup > Master Reset
Master Clear	Reset all options *except* unlock code, security code, lifetime timer, clear all user settings and entries: $\text{\textcircled{\scriptsize =}}$ > Settings > Other Settings > Initial Setup > Master Clear

Dialing Features

Feature	Description
DTMF Tones	Activate DTMF tones: $\text{\textcircled{\scriptsize =}}$ > Settings > Other Settings > Initial Setup > DTMF
	Send DTMF tones during a call: Press number keys
	Send stored numbers as DTMF tones during a call: Highlight a number in the phonebook or recent call lists, then press $\text{\textcircled{\scriptsize =}}$ > Send Tones

Call Monitoring

Feature	Description	
Call Times	View call timers: ⊜ > Recent Calls > Call Times	*Network / Subscription Dependent Feature*
In-Call Timer	Display time or cost information during a call: ⊜ > Settings > In-Call Setup > In-Call Timer	*Network / Subscription Dependent Feature*

Hands Free Features

Feature	Description	
Speaker-phone	Activate a connected external speakerphone during a call: Press SPEAKER (⊙) (if available) or ⊜ > Spkrphone On	*Optional Accessory*
Auto Answer (car kit or headset)	Automatically answer calls when connected to a car kit or headset: ⊜ > Settings > Other Settings > Car Settings or Headset > Auto Answer	*Optional Accessory*
Auto Hands-Free (car kit)	Automatically route calls to a car kit when connected: ⊜ > Settings > Other Settings > Car Settings > Auto Handsfree	*Optional Accessory*

Feature	Description
Power-Off Delay (car kit)	Set the phone to stay on for a period of time after the ignition is switched off: M > **Settings** > **Other Settings** > **Car Settings** > **Power-Off Delay**
Charger Time (car kit)	Charge the phone for a period of time after the ignition is switched off: M > **Settings** > **Other Settings** > **Car Settings** > **Charger Time**

Data Calls

Feature	Description
Send Data	Connect your phone to the device, then place the call through the device application
Receive Data	Connect your phone to the device, then: M > **Settings** > **Connection** > **Incoming Call** > **Next Call** > **Data In Only** Reset normal voice operation: M > **Settings** > **Connection** > **Incoming Call** > **Next Call** > **Normal**

Network Features

Feature	Description
Network Settings	View network information and adjust network settings: $\textcircled{\scriptsize{=}}$ > Settings > Other Settings > Network

Personal Organizer Features

Feature	Description
Add Datebook Event	Add an event to the datebook: $\textcircled{\scriptsize{=}}$ > Datebook > *day* $\textcircled{\scriptsize{=}}$ > New
View Datebook Event	View or edit event details: $\textcircled{\scriptsize{=}}$ > Datebook > *day* > *event name*
Event Reminder	View event reminder: VIEW ($\textcircled{\cdot}$) Dismiss event reminder: EXIT ($\textcircled{\cdot}$)
Record Voice Note	Record a voice note: Press and hold voice key, speak voice note, release voice key
Play Voice Note	Play back a recorded voice note: $\textcircled{\scriptsize{=}}$ > Voice Notes > *voice note*
Calculator	Calculate numbers: $\textcircled{\scriptsize{=}}$ > Calculator

Phone Features

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Feature	Description
Currency Converter	Convert currency: ⊜ > Calculator ⊜ > Exchange Rate
	Enter exchange rate, press OK (⊙), enter amount, select $ function

Security

Feature	Description	
Lock Application	Lock phone applications: ⊜ > Settings > Security > Lock Application	
Activate Voice Privacy	Send calls using a high-security connection, when available: ⊜ > Settings > Security > Talk Secure	Network / Subscription Dependent Feature

News and Entertainment

Feature	Description	
Launch Browser	Start a browser session: ⊜ > Browser	Network / Subscription Dependent Feature
Play a Game	Play a game on your phone: ⊜ > Games	

Phone Features

Feature	Description
Radio	Use the optional Motorola Original™ FM Stereo Radio Headset accessory: (≡) > **Radio**

Specific Absorption Rate Data

The Motorola C332T TDMA 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 1.51 W/kg, and when worn on the body, as described in this user guide, is 0.69 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:

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http://phonefacts.net
```

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

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http://www.cwta.ca
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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.

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, 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]

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.

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, messaging devices, 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.

Products Covered	Length of Coverage
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.
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
	Pagers 1-800-548-9954
	Two-Way Radios and Messaging Devices 1-800-353-2729
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 OR 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.

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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.

Index

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.

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

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important call

Motorola Reminds You
To Use Your Phone
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