

APPLICANT: MOTOROLA, INC.

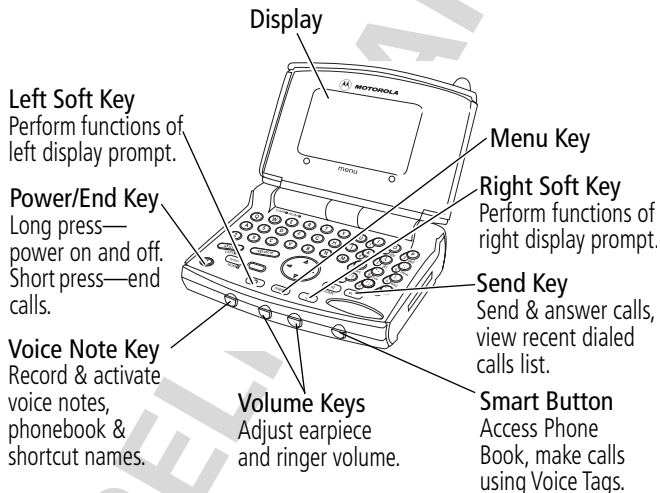
FCC ID: IHDT56BG1

INSTRUCTION MANUAL

A preliminary draft copy of the Users Manual follows:

Welcome

Congratulations! You are now the proud owner of a Motorola V102c Personal Communicator. Your Personal Communicator combines advanced calling and messaging capabilities in a stylish, compact unit.



Personal Communications Sector
600 North U.S. Highway 45
Libertyville, Illinois 60048

1-800-331-6456 (United States)
1-888-390-6456 (TTY/TDD United States)
1-800-461-4575 (Canada)

www.motorola.com

MOTOROLA, the Stylized M Logo and all other trademarks indicated as such herein are trademarks of Motorola, Inc. ® Reg. U.S. Pat. & Tm. Off. All other product or service names are the property of their respective owners.

© 2001 Motorola, Inc. All rights reserved. Printed in the U.S.A.

Computer Program Copyrights

The Motorola products described in this manual may include Motorola computer programs stored in semiconductor memories or other media that are copyrighted with all rights reserved worldwide to Motorola. Laws in the United States and other countries preserve for Motorola, Inc. certain exclusive rights to the copyrighted computer programs, including the exclusive right to copy, reproduce, modify, decompile, disassemble, and reverse-engineer the Motorola computer programs in any manner or form without Motorola's prior written consent. Furthermore, the purchase of Motorola products shall not be deemed to grant either directly or by implication, estoppel, or otherwise, any license or rights under the copyrights, patents, or patent applications of Motorola, except for a nonexclusive license to use the Motorola product and the Motorola computer programs with the Motorola product.

Manual number:

Cover number:

Menu Map

Main Menu

- **Phonebook**
- **Radio**
- **Messages**
 - Voicemail
 - Text Msgs
 - Browser Alerts
 - Quick Notes
 - Outbox
 - Drafts
- **Shortcuts**
- **Voice Notes**
- **Browser**
- **Settings**
(see next page)

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.

For example, the **Radio** feature on the main menu (left) is displayed only when the FM Stereo Radio Headset accessory is plugged into the accessory connector port on your phone (see phone illustration, page 1).

For a description of the standard menu features, see pages 53 to 64.

Shortcuts
Change display zoom: Press  , then press and hold 
Lock/unlock keypad: Press  
Display my phone number: Press  
Go to dialed calls list: Press



Settings Menu

- **Ring/Vibrate**

- Alert
- *Alert Detail*

- **Phone Status**

- My Tel. Number
- Battery Meter
- Other Information

- **Connection**

- Incoming Call

- **In-Call Setup**

- In-Call Timer
- Answer Options

- **Security**

- Phone Lock
- Lock Keypad
- Lock Application
- Restrict Calls
- New Passwords

- **Other Settings**

- Personalize
 - Main Menu
 - Keys
 - Greeting
 - Banner
 - Quick Dial
- Initial Setup
 - Time and Date
 - Auto PIN Dial
 - Auto Redial
 - Backlight
 - Zoom
 - Scroll
 - Animation
 - Language
 - Contrast Setting
 - DTMF
 - Master Reset
 - Master Clear
- Network
- Car Settings
- Headset

Contents

Menu Map	3
About This Guide	8
Safety and General Information	10
Getting Started	17
What's in the Box?	17
Installing the Battery	17
Charging the Battery	18
Turning On Your Personal Communicator	19
Sending a Call	20
Ending a Call	20
Receiving a Call	21
Displaying Your Phone Number	21
Basic Features	22
Display	22
Changing the Zoom Setting	24
Volume Keys	25
Battery Use	25
Messages—Text	27
Setting Up the Text Message Inbox	27
Receiving a New Text Message	28
Reading, Locking, or Deleting a Text Message	29
Sending a New Text Message	30
Sending a New Text Message to More Than One Person	32
Sending a Quick Note Text Message	33
Sending a Quick Note to More than One Person	34
Sending and Receiving Calls	37
Redialing a Number	37
Using Automatic Redial	37

Contents

Caller ID	38
Dialing an Emergency Number When the Personal Communicator Is Locked	38
Dialing With Speed Dial	39
Dialing With One-Touch Dial	39
Additional Dialing Features	40
Using Features While On a Call	42
Using Call Waiting	42
Making a Three-Way Call	42
Additional On-Call Features	43
Using the Menu	44
Navigating to a Feature	44
Selecting a Feature Option	45
Entering Feature Information	46
Entering Text	48
Choosing a Text Mode	48
Tap Method	49
Predictive Text Entry with iTAP™ Software	50
Menu Feature Descriptions	53
Main Menu Features	53
Settings Menu Features	57
Phonebook	65
Fields in a Phonebook Entry Form	65
Storing a Phonebook Entry	66
Recording a Voice Name For a Phonebook Entry	68
Dialing a Phonebook Entry	69
Radio	71
Turning the Radio On and Off	71
Tuning a Station	72

Contents

Storing a Preset	72
Selecting a Preset	72
Sending and Receiving Calls With the Radio On	73
Messages—Voicemail	74
Storing Your Voicemail Number	74
Receiving a New Voicemail Message	74
Listening to a Voicemail Message	75
Voice Notes	76
Recording a Voice Note	76
Playing a Voice Note	77
Micro-Browser	78
Starting a Micro-Browser Session	78
Interacting With Web Pages	79
Adjusting Your Settings	80
Ring/Vibrate	80
Reordering Menu Items	81
Customizing a Soft Key Function	82
Security	83
Assigning a New Code or Password	83
Locking and Unlocking Your Personal Communicator	83
Locking and Unlocking Your Keypad	85
Troubleshooting	87
Specific Absorption Rate Data	91
FDA Update	94
Warranty	103
Export Law Assurances	110
Index	111
Wireless Phone Safety Tips	119

About This Guide

Using Your Personal Communicator's Features

This guide introduces you to the many features in your Motorola Personal Communicator. A reference guide for your Personal Communicator is also available that explains its features in more detail. To obtain a copy of the reference guide 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.

Navigating To a Menu Feature

You can access many of your Personal Communicator's features through the menu system. This guide shows you how to navigate to a specific 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 must press , scroll to and select **Recent Calls**, then scroll to and select **Dialed Calls** to view the dialed calls list.

Optional Features



Features marked with this icon are optional network and/or subscription-dependent features that 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 icon require the use of an optional Motorola Original™ accessory.

Safety and General Information

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

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 1850 MHz to 1910 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 0.04 watts to 0.49 watts in analog mode and 0.0 watts to 0.57 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 (EME):

- 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.

Safety and General Information

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 a body-worn accessory, and are not holding the phone in the normal use position at the ear, 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.motorola.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.

Safety and General Information

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.

ITC01-065

Getting Started



What's in the Box?

Your Personal Communicator typically comes equipped with a battery and a charger. Other accessory options can customize your Personal Communicator 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.

Installing the Battery

Before you can use your Personal Communicator, you need to install and charge the battery.



Your Personal Communicator 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.

Do This

- 1 Remove the battery from its protective clear plastic case.
- 2 Unlock the battery door by pushing the release latch away from the battery door..



Getting Started

Do This

- 3 Press the battery door at the arrow, push it away from the Personal Communicator, and remove it.
- 4 Insert the battery, printed arrows first, into the battery compartment, and push down.
- 5 Replace the battery door.
- 6 Push the release latch toward the battery door to lock it into place.

Charging the Battery

Before you can use your Personal Communicator, you need to install and charge the battery.

Do This

- 1 Plug the travel charger into your Personal Communicator with the release tab facing up.



Do This (Continued)

- 2 Plug the other end of the travel charger into the appropriate electrical outlet.
- 3 When your Personal Communicator indicates that the battery is fully charged, press the release tab and remove the travel charger.

Turning On Your Personal Communicator

Do This

To

- 1 Press and hold  (the power key) turn on your Personal Communicator

Power —
key

- 2 Enter your four-digit unlock code and press **OK** () unlock your Personal Communicator, if necessary
The unlock code is originally set to 1234.

Sending a Call

To call a number:

- your headset must be connected to your Personal Communicator
- your Personal Communicator must be opened, turned on, unlocked, and have a network connection with adequate signal strength

Do This	To
1 Press the keypad keys	dial the phone number (up to 32 digits) If you make a mistake, press DELETE (⏮) to delete the last digit, or press and hold DELETE (⏮) to clear all digits.
2 Press send	send the call

Ending a Call

Press	To
end	end the call



Receiving a Call

To receive a call:

- your headset must be connected to your Personal Communicator
- your Personal Communicator must be turned on, unlocked, and have a network connection with adequate signal strength

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

Press	To
or ANSWER (○●)	answer the call

When your Personal Communicator is closed or in its holster, you can answer the call by pressing  (Smart Key), located on the front of your Personal Communicator.

Displaying Your Phone Number

From the idle display:

Press	To
 	see your phone number

Basic Features

See page 1 for a diagram of your Personal Communicator that describes its basic features.

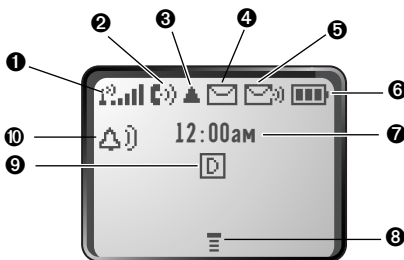
Display

The top section of the display shows Personal Communicator status indicators. The following illustration shows some of the common indicators that you may see at the top of the display when using your Personal Communicator.

- Messages, phone numbers, and menu options appear in the middle of the display.
- The current soft key functions appear at the bottom corners of the display show the current soft key functions.
- A  (menu) indicator in the bottom center of the display indicates that you can open the main menu or a feature sub-menu to see more options.

For more information about the soft key and menu key labels, see “Using the Menu” on page 44.

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



❶ Signal Strength Indicator Shows the strength of your Personal Communicator's connection with the network.

Strong      No signal

You cannot send or receive calls when the "no signal" indicator is displayed.

❷ In Use Indicator Appears when a call is in progress.

❸ Roam Indicator Appears when your Personal Communicator uses another network system outside your home network. When you leave your home network area, your Personal Communicator *roams* or seeks another network.



❹ Message Waiting Indicator Appears when your Personal Communicator receives a text message.



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

Basic Features

⑥ Battery Level Indicator Shows the amount of charge left in your battery. The more segments visible, the greater the charge.

High     Empty

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



⑦ Clock Shows the current time. The clock is available only when your Personal Communicator is operating in digital mode.

⑧ Menu Indicator Indicates that you can press  to open a menu. See "Using the Menu" on page 44.

⑨ Digital () or Analog () Signal Indicator Shows whether you are receiving a digital or analog signal.

⑩ Alert Setting Indicator Shows the current selected alert. The default alert setting is a ringer.

 Loud ring

 Soft ring

 Vibrate

 Ring and vibrate

 Silent

Changing the Zoom Setting

You can set your Personal Communicator's display to show three lines or two lines of text plus soft key labels. Three lines of text display more information, while two lines increase text size.

To change the display view, press  once, then press and hold  again within two seconds.



You can also adjust the zoom setting from the menu. See "Zoom" on page 62.

Volume Keys

Use the upper and lower volume keys (on the front of your Personal Communicator) to adjust earpiece and ringer volume.

When	Press	To
During a call	volume keys	increase or decrease earpiece speaker volume
From the idle display	volume keys	increase or decrease ringer volume

You can also use the volume keys to scroll up or down through menus and lists.

To change keypad volume, see "Select a Ring/Vibration for a Specific Event" on page 81.

Battery Use

Caution: To prevent injuries or burns, do not allow metal objects to contact or short-circuit the battery terminals.

To maximize battery performance:

- Always use Motorola approved batteries and battery chargers. The Personal Communicator warranty does not cover damage caused from using non-Motorola batteries and/or battery chargers.

Basic Features

- New batteries or batteries that have been stored for long periods of time may require a longer charge time.
- Maintain the battery at or near room temperature when charging.
- Do not expose batteries to temperatures below -10°C (14°F) or above 45°C (113°F). Always take your Personal Communicator with you when you leave your vehicle.
- When you do not intend to use a battery for a while, store it uncharged in a cool, dark, dry place, such as a refrigerator.
- Over extended periods of time, batteries gradually wear down and require longer charging times. This is normal. If you charge your battery regularly and notice a decrease in talk time or an increase in charging time, then it is probably time to purchase a new battery.
- The more you talk on the Personal Communicator or use its features (like sending text messages), the less standby time your battery has.



The rechargeable batteries that power this product must be disposed of properly and may need to be recycled. Refer to your battery's label for battery type.

Contact your local recycling center for proper disposal methods. Never dispose of batteries in a fire because they may explode.



Messages – Text



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

You must set up the text message inbox *before* you can send and receive messages. The total number of messages the inbox can store depends on the length of the messages and on how many other messages and drafts are stored.

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

Setting Up the Text Message Inbox

Find the Feature

 > Messages

 > Text Msg Setup

Press	To
1 	scroll to Srvce Center No.
2 CHANGE ()	change the Srvce Center No. provided by your service provider
3 keypad keys	enter the phone number for the service center that handles your outgoing messages
4 OK ()	store your service center number
5 CHANGE ()	change the Expire After period

Messages—Text

Press	To
6 keypad keys	enter the expiration period—the number of days your network tries to send unreceived messages
7 OK (○)	store the expiration period
8 CHANGE (○)	change the Cleanup setting
9 ⌂	scroll to the period of time that messages stay in your inbox
10 SELECT (○)	select the cleanup period If you select Custom , continue. Otherwise, the procedure is complete.
11 ⌂	change the entry for the number or label
12 ⌂	switch between the number and the label
13 DONE (○)	store the custom cleanup period after you finish entering all information

Receiving a New Text Message

Note: You must set up the text message inbox before you can receive text messages.

When you receive a new message, your Personal Communicator displays **New Message**  and sounds an alert. If reminders are turned on, a reminder is sent every five minutes until you close the new message notification, read the message, or turn off your Personal Communicator.



When your inbox is full, each new message replaces the oldest unlocked message.

From the new message notification:

Press	To
READ (○)	open the message (or your text message inbox if there are multiple messages)

Reading, Locking, or Deleting a Text Message

You can open your text message inbox to read, lock, or delete messages at any time.

Messages in the text message inbox are sorted from newest to oldest. Oldest messages are deleted as new ones are added. To save a message, lock it to prevent it from being overwritten by a new message.

Find the Feature

(menu) > Messages > Text Msgs

Press	To
1 (○)	scroll to the message you want (! = unread and urgent, ✓ = read, 🔒 = read and locked)
2 READ (○)	open the message

Messages—Text

Press	To
3 SAVE (○●)	close the message without changes
or	
DELETE (○●)	delete the message
or	
menu	open the Text Msg Menu and scroll to other options such as Lock/Unlock

Sending a New Text Message

To create and send a new text message:

Find the Feature

menu > **Messages > Text Msgs**
menu > **Create Message**

Press	To
1 CHANGE (○●)	select To
2 keypad keys	enter the phone number or email address where you want to send the message Note: To send the message to multiple recipients, see “Sending a New Text Message to More Than One Person” on page 32.
3 OK (○●)	store the number or email address
4 CHANGE (○●)	select Msg
5 keypad keys	enter the text message (see “Entering Text” on page 48)



Press	To
6 OK (●)	store the text message Note: Message length is limited. When 40 or fewer characters remain, a two-digit counter at the top of the display shows how many are left.
7 CHANGE (●)	select Priority
8 ⌚	scroll to the priority you want
9 SELECT (●)	set the priority
10 CHANGE (●)	select Call
11 keypad keys	enter the number you want your recipient to call back (the message's From field)
12 OK (●)	store the number
13 DONE (●)	finish the message Your Personal Communicator displays Send Message Now?
14 YES (●) or NO (●)	send the message cancel the message or save it as a draft

Sending a New Text Message to More Than One Person

You can create and send a single text message to multiple recipients. To create the message:

Find the Feature

 > **Messages** > **Text Msgs**
 > **Create Message**

Press	To
1 CHANGE ()	select To
2 BROWSE ()	open the Browse Menu
3 	scroll to Phonebook
4 SELECT ()	select Phonebook
5 	scroll to a phone number or email address where you want to send the message
6 ADD ()	add the number or address to the group of message recipients Note: To add more recipients, scroll to and select other phone numbers and/or email addresses from the phonebook list.
7 DONE ()	close the phonebook list and return to the To field in the text message window



Press	To
8 OK (○●)	store the numbers/addresses and complete the other message fields (for details, see “Sending a New Text Message” on page 30)
or	
(menu)	open the To Menu to browse for more phone numbers or email addresses
	• Press (○●) to scroll to Browse • Press SELECT (○●) to open the Browse Menu and repeat this procedure for the additional numbers/addresses

Sending a Quick Note Text Message

Quick notes are short, pre-written text messages that you can create, select, edit, and send quickly (for example, **Meet me at ...**).

To send or save a quick note message:

Find the Feature

(menu) > **Messages** > **Quick Notes**

Press	To
1 (○●)	scroll to the quick note
2 (menu)	open the Quick Note Menu to perform other procedures as described in the following list

Messages—Text

The Quick Note Menu includes the following options:

Option	Description
New	Open an editor where you can create a new quick note. Enter text and press OK (⊙) to save it as a quick note.
Edit	Open an editor where you can edit the selected quick note. Edit the quick note text and press OK (⊙) to save your changes.
Delete	Delete the selected quick note.
Send	Open a new message, with the selected quick note text in the Msg field. Complete the other fields in the message. (For details, see “Sending a New Text Message” on page 30.) To send the quick note to multiple recipients, see “Sending a Quick Note to More than One Person” on page 34.

Sending a Quick Note to More than One Person

To send a quick note text message to multiple recipients:

Find the Feature



> **Messages** > **Quick Notes**



Press	To
1	scroll to the quick note
2	open the Quick Note Menu .
3	scroll to Send
4 SELECT	select Send
5 CHANGE	select To
6 BROWSE	open the Browse Menu
7	scroll to Phonebook
8 SELECT	select Phonebook
9	scroll to a phone number or email address where you want to send the message
10 ADD	add the number or address to the group of message recipients To add more recipients, scroll to and select other phone numbers and/or email addresses from the phonebook list.
11 DONE	close the phonebook list and return to the To field in the quick note text message window

Messages—Text

Press

12 OK (●)

To

store the numbers/addresses and complete the other message fields (for details, see “Sending a New Text Message” on page 30)

or

(menu)

open the **To Menu** to browse for more phone numbers or email addresses

- Press (⌂) to scroll to **Browse**
- Press **SELECT** (●) to open the **Browse Menu** and repeat this procedure for the additional numbers/addresses



Sending and Receiving Calls

For basic instructions on how to send a call, end a call, and receive a call, see page 20 of the “Getting Started” section.

Redialing a Number

If you hear an ordinary busy signal, the phone number you dialed is busy. From the idle display:

Press	To
1 	go directly to the dialed calls list
2 	scroll the entry you want to call
3 	redial the busy number

Using Automatic Redial

If the network is busy, you hear a fast busy signal, and your Personal Communicator displays the message **Call Failed**.

When you activate automatic redial, your Personal Communicator repeats the call attempt over the next four minutes.

Press	To
or RETRY 	activate automatic redial

When the call goes through, your Personal Communicator rings or vibrates once, displays **Redial Successful**, and then connects the call automatically.

Sending and Receiving Calls

You must activate automatic redial in order to use the feature.
See the “Auto Redial” item on page 62.

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 Personal Communicator automatically displays the name. Otherwise, the Personal Communicator displays the caller's phone number.
- If caller ID information is not available, your Personal Communicator displays the message **Incoming Call**.

Dialing an Emergency Number When the Personal Communicator Is Locked

Your service provider may program one or more emergency phone numbers that you can call even if your Personal Communicator is locked or restricted.

When you see **Enter Unlock Code** in the display:

Press	To
1 keypad keys	dial the emergency number (such as 911 or 112)
2 	call the emergency number



Dialing With Speed Dial

The *speed dial* feature lets you dial any phonebook entry with a minimal number of keypresses.

Whenever you store an entry in your phonebook, the entry is assigned a unique speed dial number. If you know the speed dial number for the phonebook entry you want to call, you can use the speed dial feature.

Press	To
1 keypad keys	enter the one-, two-, or three-digit speed dial number for the entry you want to dial
2 	submit the number
3 	call the entry

To make an entry in the phonebook or view an existing entry's speed dial number, see "Storing a Phonebook Entry" on page 66.

Dialing With One-Touch Dial

You can call phonebook entries 2 through 9 with the push of a single key. Just press and hold the one-digit speed dial number for one second.

It is recommended that you reserve location 1 in the phonebook for storing your voicemail number. In many cases, your service provider has already stored your voicemail number in location 1.

Sending and Receiving Calls

If your voicemail number is not accessible by pressing and holding the  key, complete the following steps:

Do This	To
1 Store your voicemail number in phonebook location number 1 (see "Storing a Phonebook Entry" on page 66)	enable the  key voicemail shortcut
2 Complete the instructions for "Storing Your Voicemail Number" on page 74	enable voicemail soft key and menu shortcuts

To store entries in locations 2 through 9 in the phonebook, see "Storing a Phonebook Entry" on page 66.

Additional Dialing Features

In addition to pressing numbers on your keypad, you can insert numbers or characters and send calls in a variety of ways.

While dialing (with digits visible in the display):

Do This	To
Press  > Attach Number	attach a number from the phonebook or recent calls list to the end of the digits you entered
Press  > Send Message	create a text message addressed to the number entered



Do This	To
Press menu and then scroll to and select one of the following: • Insert Pause (to insert a p) • Insert Wait (to insert a w) • Insert 'n' (to insert an n)	insert a special character when making a calling card call: • Pause tells your Personal Communicator to wait until the call connects before it sends the next digit. • Wait tells your Personal Communicator to wait until the call connects, and then to prompt you before it sends the next digit. • 'n' tells your Personal Communicator to stop and to prompt you for a number before it sends the next digit.

You can also call numbers using these features:

Do This	To Call
Press and release the voice key on the right side of your phone and say the entry's name (in two seconds).	a phone number using the voice dial feature See "Recording a Voice Name For a Phonebook Entry" on page 68.
Press menu > Recent Calls > Received Calls or Dialed Calls > <i>entry to call</i>	a missed call or a number from a call you recently dialed or received

Using Features While On a Call

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
1 send	answer the new call
2 send	switch back to the first call

To end the first call and answer the second call:

Press	To
1 end	end the current call Your Personal Communicator rings to signal the new call.
2 send	answer the new call

Making a Three-Way Call



During a call, you can call and connect a third party so that the three of you can talk together. You cannot do this if you already have a call on hold.



During a call:

Press	To
1 keypad keys	enter the third person's number
2 send	call the number and connect the new person
3 send	connect the two calls
4 end	end the entire call

Additional On-Call Features

While you are on a call, you can perform the following tasks:

Do This	To
Press MUTE ()	mute a call
Press menu > My Tel. Number	see your phone number
Press menu > Send Tones	send a number to the network as DTMF tones, for credit card calling or password entry To activate DTMF tones, see the "DTMF" item on page 63.

Using the Menu

Navigating to a Feature

You can access many of your Personal Communicator's features by using these keys to move through the menu system:

Scroll Keys

Move up or down through menus and lists.

Left Soft Key

Perform function shown in the lower left corner of the display (usually **EXIT** or **BACK**).

Menu Key

Enter the menu system, or open a sub-menu, when  appears in the bottom center of the display.

Volume Keys

Move up or down through menus and lists.

Smart Button

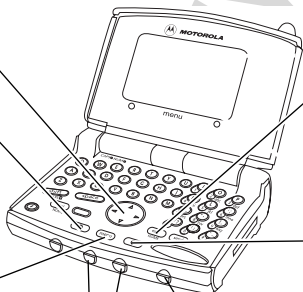
Access Phone book, make calls using Voice Tags.

End Key

Exit the menu system without making changes, return to the idle display

Right Soft Key

Perform function shown in lower right corner of the display (usually **SELECT** the highlighted menu item).



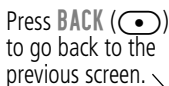
Find the Feature

> Recent Calls

> Dialed Calls

The > symbol means that you should scroll to and select the feature. In this example, you should press , scroll to and select **Recent Calls**, then scroll to and select **Dialed Calls**.

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



Highlighted
item

A sub-menu is available.
Press  to open it.

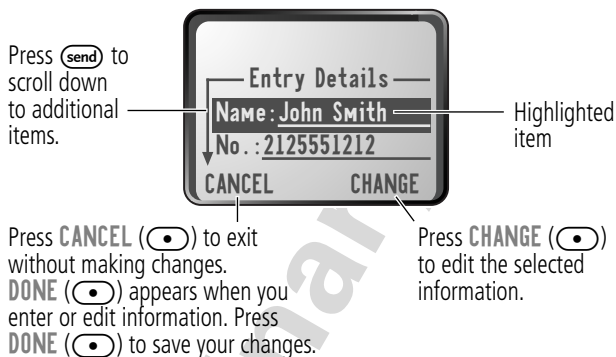
Press **VIEW** () to view details of the highlighted item.
STORE () appears if you can store the item in your phonebook.

Select an item by highlighting it with any of these methods:

- Press **send** 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.

Entering Feature Information

Features such as the phonebook require you to enter information to fill in one or more items:

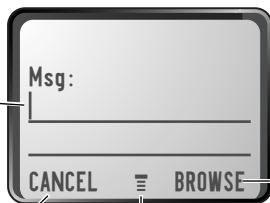


- Enter numbers or text with the keypad. (See "Entering Text" on page 48.)
- When an item has a list of possible values, press or to scroll through and select a value.
- When an item has a list of possible numeric values, press a number key to set the value.
- If you enter or edit information and then decide that you do not want to save your changes, press **end** to exit without saving.



The message center lets you compose and send text messages. (See "Entering Text" on page 48.) A *flashing cursor* shows you where the text will appear:

Flashing cursor indicates insertion point.



Press **BROWSE** (○●) to view and insert a name, number, or message from previously stored information.

Press **CANCEL** (○●) to exit without making changes.

Press (menu) to open the sub-menu.

When you enter text, 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, the block cursor reverts to a flashing cursor and moves to the next position.

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

Entering Text

Various text entry methods make it easy for you to enter names, numbers, email addresses, and text messages on your Personal Communicator.

You can enter all characters (letters, numbers, and symbols) using the standard tap method. Other text modes let you easily enter numbers or insert text already stored on your Personal Communicator. Finally, a predictive text mode lets you enter text messages with a minimum of keypresses.

Choosing a Text Mode

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

iTAP Let the Personal Communicator predict each word as you enter it, then choose the word from a list (see “Predictive Text Entry with iTAP™ Software” on page 50).

Tap Method Enter characters one at a time by pressing the key for the letter, number, or symbol (see “Tap Method” on page 49). **This is the standard mode for entering text on your Personal Communicator.**

Numeric Enter only the number that appears on each key.
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.

Tap Method

Tap method is the default standard mode for entering text on your Personal Communicator.

To enter text using the tap method:

Do This	To
1 Press a number key one or more times	cycle through the characters associated with the key and select the character you want (see the "Character Chart" on page 50).
2 Continue to press number keys	enter the rest of the characters in the text message
3 Press OK ()	accept and store the text when you are finished

General Text Entry Rules

Use the keypad to enter letters, numbers, symbols, and other characters with the tap method. Press the same key repeatedly to cycle through available characters (see the "Character Chart" on page 50):

- To enter text at a flashing cursor, press a number key.
- To enter the desired character, press the number key as many times as necessary. For example, press  three times to enter the "c" character.
- To cycle between uppercase and lowercase characters, press and hold a key.

Entering Text

- To move the flashing cursor up or down one line in a text message, or to change a character in block cursor to uppercase or lowercase, press the up or down arrow on the  key.
- To move the flashing cursor to the left or right in a text message, press the left or right arrow on the  key.
- 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 unless you manually change it. (Hold the number key or press  down to force the character to lowercase while it is highlighted by the block cursor.)

Character Chart

Use this chart as a guide for entering spaces, numbers, letters, symbols, and other characters with the tap method. Press and hold a key to cycle between uppercase and lowercase characters.

	space . 1 ? ! , @ _ & : ; " - () ' ç i % £ \$ ¥ ¤
	+ - 0 x * / = > < # §

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.

You must activate iTAP software prior to entering letters. You can do this from any text entry screen by pressing  and selecting the **iTAP** menu option.

Enter Words

To enter a word:

Do This	To
1 Press a number key one time	enter the first letter of the word The letters associated with the key you pressed are shown at the bottom of the display.
2 Press number keys (one per letter)	enter the rest of the word Alternative words and letter combinations are shown at the bottom of the display based on the keys you press. These word choices are updated with each keypress.
3 When you have entered all the letters of the word, press 	locate and highlight the word you want
4 Press SELECT ()	add the highlighted word to the text area at the top of the display A space is automatically inserted after the word.

Enter Novel Words

You may enter a word that is not in the iTAP software dictionary. If you enter all the letters of a word but the word is not displayed:

Do This	To
1 Press DELETE (⏏) one or more times	delete one or more letters until you see a letter combination that matches the start of the word
2 Press ⏏	highlight the letter or letter combination
3 Press SELECT (⏏), then press ⏏	shift the text entry cursor to the left and "lock" the selected portion of the word
4 Continue entering letters and highlighting letter combinations	spell the word

Menu Feature Descriptions



This chapter describes all of your Personal Communicator's features in order of the menu map shown on page 3. Some descriptions also include page numbers where you can find more detailed information. If you would like to learn more about a specific feature, a reference guide for your Personal Communicator is also available. To obtain a copy of the reference guide 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.

Main Menu Features

RECENT CALLS

View the numbers of your recent dialed calls and received calls. Press **(send)** to go directly to the dialed calls list from the idle display.

Received Calls

(menu) > Recent Calls
> Received Calls

View a list of recently received calls.

Your Personal Communicator keeps a list of the numbers from calls you recently received, even if you did not answer. You can scroll through the list until you find an entry you want to call, store, or delete.

Menu Feature Descriptions

Dialed Calls

(menu) > Recent Calls
> Dialed Calls

View a list of recently dialed calls. Your Personal Communicator keeps a list of recently dialed phone numbers, even if the calls did not connect. A ✓ means the call connected. You can scroll through the list until you find an entry you want to call, store, or delete.

Notepad

(menu) > Recent Calls
> Notepad

Stores the last phone number entered on the keypad. The number may be the last number you called or a number you entered during a phone call.

You can call the number on the notepad or you can store it as part of a phonebook entry.

Call Times

(menu) > Recent Calls
> Call Times

View call timers, which record *network connection time*, the elapsed time from the moment you connect to your service provider's network to the moment you end the call by pressing (end).

The amount of network connection time you track on your 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.

You can scroll through a list of five timers: Last Call, Dialed Calls, Received Calls, All Calls, and Lifetime.



PHONEBOOK

 > **Phonebook**

 > **Phonebook Menu**

Create and manage a personalized phonebook. You can call numbers stored in the phonebook, and send text messages to entries with email addresses.

Create a phonebook entry

Enter a name, phone number or email address, and type indicator (such as *home* or *work*). The Personal Communicator will assign a speed dial number. See page 66.

Set up voice dial

Record a voice name you can use to dial a phone number by saying the person's name. See page 68.

Edit a phonebook entry

View and then update details of a phonebook entry.

Dial a phonebook entry

Use the phonebook list, voice dial, speed dial, or one-touch dial to call a number or send a text message to an email address. See pages 39 and 70.

Delete a phonebook entry

Use the **Phonebook Menu** to remove outdated entries.

Check phonebook capacity

See how many of the phonebook's entries have been used (up to 400).

Sort phonebook entries

Sort entries by speed dial number or by name or voice dial.

Menu Feature Descriptions

QUICK DIAL

 > Quick Dial

Dial pre-programmed customer service numbers.

Your service provider may program one or more quick dial numbers, such as the customer service number, into your Personal Communicator. You can call them by selecting them from the quick dial list.

Note: Your service provider may use a different name for this feature.



RADIO

 > Radio

Listen to FM radio stations. This menu feature is displayed only when the optional Motorola Original™ FM Stereo Radio headset is plugged into the accessory connector port on your Personal Communicator. See "Radio" on page 71.



MESSAGES

 > Messages

Adjust message settings, view and manage the various types of messages your Personal Communicator can receive and/or send:



Voicemail

Store and call the voicemail number provided by your service provider. See "Messages—Voicemail" on page 74.

Text Msgs

Send and receive text messages. See "Messages—Text" on page 27.

Browser Alerts

Read alert messages received by your micro-browser.

Quick Notes

Select and send pre-written messages from the quick notes list.



Outbox

View all outgoing text messages, delivered and undelivered.

Drafts

Store and edit text messages that you have written but not sent.

SHORTCUTS

 > **Shortcuts**

Create keypad or voice shortcuts to menu features.

VOICE NOTES

 > **Voice Notes**

Use the voice key to record and playback messages and phone calls. See "Voice Notes" on page 76.

BROWSER

 > **Browser**

Access Web pages and run Web-based applications.

The micro-browser delivers WAP (Wireless Application Protocol) pages from your service provider directly to your Personal Communicator. See "Micro-Browser" on page 78.



Settings Menu Features

RING/VIBRATE

Alert

 > **Settings**
> **Ring/Vibrate**
> **Alert**

Select a type of ring or vibration alert for incoming calls and messages. See "Ring/Vibrate" on page 80.

Menu Feature Descriptions

Alert Detail

-  > Settings
- > Ring/Vibrate
- > Alert Detail

Change details about the ring or vibration alert. *Alert* represents the name of the current alert setting. See “Ring/Vibrate” on page 80.

PHONE STATUS

My Tel. Number

-  > Settings
- > Phone Status
- > My Tel. Number

View, enter, and edit your name and phone number.

Battery Meter

-  > Settings
- > Phone Status
- > Battery Meter

View a detailed battery charge meter.

Other Information

-  > Settings
- > Phone Status
- > Other Information

View the Personal Communicator's feature specifications (if available from the service provider).

CONNECTION

Connect your Personal Communicator to a computer or hand-held device to send and receive data and fax calls on the connected device.

Connect your Personal Communicator using a serial cable or USB cable. See:

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





Incoming Call

- menu** > Settings
- > Connection
- > Incoming Call

Specify the format for the next incoming call. You can select **Fax In Only**, **Data In Only**, or **Normal**.

IN-CALL SETUP

Use the in-call setup menu to set the features that are active during a call, such as the in-call timer and call answering options.

In-Call Timer

- menu** > Settings
- > In-Call Setup
- > In-Call Timer

Adjust call timer display and beep settings. You can set your timer to beep at a selected interval during your calls. (60 seconds is the default.) You can also turn on or off a display timer during calls as follows:

Time Display the elapsed time for the current call.

Off Hide the in-call timer.

Answer Options

- menu** > Settings
- > In-Call Setup
- > Answer Options

Turn call answering options on or off:

Multi-Key Answer by pressing any key.

Menu Feature Descriptions

SECURITY

Change the four-digit unlock code and a six-digit security code to prevent other users from accessing your personal information or modifying your Personal Communicator settings.

Phone Lock

 > **Settings** > **Security**
> **Phone Lock**

Lock and unlock your Personal Communicator. See “Locking and Unlocking Your Personal Communicator” on page 83.

Lock Keypad

 > **Settings** > **Security**
> **Lock Keypad**

Lock and unlock your keypad to prevent accidental keypresses that might inadvertently dial an emergency number or one-touch dial number.

Lock Application

 > **Settings** > **Security**
> **Lock Application**

Lock and unlock specific Personal Communicator applications (such as phonebook) so that users must enter the unlock code before they can use the applications.

Restrict Calls

 > **Settings** > **Security**
> **Restrict Calls**

Restrict all incoming and outgoing calls, or restrict them to numbers stored in your phonebook. A restricted incoming call is treated as unanswered. Your Personal Communicator displays **Missed Calls** and adds it to the received list.

You can still call emergency numbers when outgoing calls are restricted. Your Personal Communicator still receives incoming text messages when incoming calls are restricted.



New Passwords

 > **Settings** > **Security**
> **New Passwords**

Change your unlock code (originally set to 1234) or your security code (originally set to 000000). See "Assigning a New Code or Password" on page 83.

OTHER SETTINGS

Use the other settings menu to view or adjust personal options, the initial setup of your Personal Communicator, how it connects to your service provider's network, and the setup of optional equipment needed for hands-free use.

Personalize

 > **Settings**
> **Other Settings**
> **Personalize**

Set several personal Personal Communicator options:

Main Menu

Change the order of the main menu. See "Reordering Menu Items" on page 81.

Keys

Change the functions of the soft keys in the idle display. See "Customizing a Soft Key Function" on page 82.

Greeting

Change the text displayed when you turn on your Personal Communicator.

Banner

Change the text that appears in the idle display.

Quick Dial

Change quick dial number(s).

Menu Feature Descriptions

Initial Setup

-  > Settings
- > Other Settings
- > Initial Setup

Set many basic Personal Communicator options:

Time and Date Set the Personal Communicator's time and date.

Auto PIN Dial Some networks require an authenticating PIN to allow outgoing calls. Use this feature to automatically dial your PIN.



Auto Redial Automatically redial calls that fail due to busy network conditions.

Backlight Set the amount of time that the display backlight remains on, or turn off the backlight to conserve battery power.

Zoom Switch between three lines (**Zoom Out**) and two lines (**Zoom In**) of display text.

Scroll Force the cursor to stop or wrap around when it reaches the top or bottom of a list in the display.

Animation Turn animation off (to conserve the battery) or on. Animation makes your Personal Communicator's menus move smoothly as you scroll up and down.

Language Set the language for menus.



Contrast Setting

Adjust your display contrast setting.

DTMF

Switch DTMF tones or off.

Master Reset

Reset all options to their original factory settings *except* for the unlock code, security code, and lifetime timer.

Master Clear

Reset all options back to their original factory settings *except* for the unlock code, security code, and lifetime timer, *and* clear all user settings and entries.

Note: This option *erases all user-entered information* stored in your Personal Communicator's memory, including phonebook entries. Once you erase the information, it cannot be recovered.

Network



- > Settings
- > Other Settings
- > Network

View and adjust your Personal Communicator's network settings.

Your service provider registers your Personal Communicator to a network. You can view information about the current network, change how your Personal Communicator searches for a network, and turn on/off alerts that indicate when a call is dropped or network registration changes.

Menu Feature Descriptions

Car Settings

-  > Settings
- > Other Settings
- > Car Settings



Adjust hands-free settings for an optional Motorola Original™ car kit (purchased separately).

Note: The use of wireless devices and their accessories may be prohibited or restricted in certain areas. Always obey the laws and regulations on the use of these products.

Auto Answer Set the car kit to automatically answer calls after two rings.

Auto Handsfree Set your Personal Communicator to detect and automatically route calls to the car kit.

Power-Off Delay Specify the amount of time the car kit delivers power to the Personal Communicator after you switch off the ignition.

Charger Time Specify the amount of time the car kit uses your car battery to charge your Personal Communicator after you switch off the ignition.

Headset

-  > Settings
- > Other Settings
- > Headset



Set your Personal Communicator to automatically answer calls after two rings when connected to a headset.

Phonebook



You can store a list of names and phone numbers or email addresses in your Personal Communicator's electronic phonebook. Your Personal Communicator can store up to 400 entries. You can view these entries and call them directly from your Personal Communicator. For email addresses, you can send a text message directly from your Personal Communicator.

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

Fields in a Phonebook Entry Form

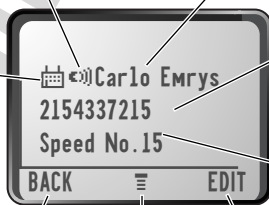
Voice Name indicator

indicates a recorded voice name

Entry's Name

Type indicator
identifies
number type:

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



Entry's phone
number or
email address

Entry's speed
dial number

Return
to list

Press **[menu]**
to open the
Phonebook
Menu

Edit
entry

Storing a Phonebook Entry

A phone number is required for a phonebook entry. All other information is optional.

Shortcut: Enter a phone number in the idle display, then press **STORE** () to create a phonebook entry with the number in the **No.** field.

Enter Information

Find the Feature

 > **Phonebook**
 > **New**

Press	To
1 	scroll to Phone Number or Email Address
2 SELECT ()	select the type of entry
3 CHANGE ()	select Name
4 keypad keys	enter a name for the entry (see "Entering Text" on page 48)
5 OK ()	store the name
6 CHANGE ()	select No. or Email
7 keypad keys	enter phone number or email address
8 OK ()	store the number or address
9 CHANGE ()	select Type
Note: This option is not available for email entries. When you enter an email address, an  (email) type indicator is applied automatically.	



Press	To
10	scroll to the type of phone number
11 SELECT (	select the number type
12 RECORD (or Go to step 13 if you don't want to record a voice name.	record a voice name for the entry, if desired See "Recording a Voice Name For a Phonebook Entry" on page 68.
13	scroll to Speed No. , the number to <i>speed dial</i> the entry The next available speed dial number is assigned to a new phonebook number by default.
14 CHANGE (	select Speed No. if you want to change it
15 keypad keys	enter a different speed number, if desired
16 OK (	save the modified speed number If your chosen speed number is already assigned to another entry, you are asked if you want to replace that entry.
17 SELECT (	select MORE if you want to create another entry with the same Name Note: You must enter a name and number to use this option.

Complete Phonebook Entry

When you are finished entering information for a phonebook entry:

Press	To
DONE (●)	store the entry and return to the phonebook list

Recording a Voice Name For a Phonebook Entry

You can record a voice name when you create a new phonebook entry or when you edit a previously stored phonebook entry. This lets you use voice dial to call the number without dialing. (See “Voice Dial” on page 70.)

Your Personal Communicator can store a total of 20 voice names.

Tip: Record your voice name in a quiet location. Hold the Personal Communicator about four inches (10 centimeters) from your mouth, and speak directly into the microphone in a normal tone of voice.

Find the Feature

(menu) > **Phonebook**

Do This	To
1 Press (⌂)	scroll to the desired entry
2 Press VIEW (●)	display the entry's detailed view
3 Press EDIT (●)	edit the phonebook entry
4 Press (⌂)	scroll to Voice Name



Do This	To
5 Press RECORD (⏺)	begin the recording process The Personal Communicator displays Press Voice key then say name.
6 Press and release the voice key on the front of your Personal Communicator, and speak the entry's name within two seconds	record the voice name The Personal Communicator displays Press Voice Key then REPEAT name.
7 Press the voice key and repeat the name	confirm the voice name The Personal Communicator displays Trained: Voice Name.

Dialing a Phonebook Entry

You can use the phonebook list, voice dial, speed dial, or one-touch dial to call a number (or send a text message to an email address) stored in your phonebook. To use speed dial, see "Dialing With Speed Dial" on page 39. To use one-touch dial, see "Dialing With One-Touch Dial" on page 39.

Phonebook List

To call a number or send email to an entry in the phonebook list:

Find the Feature  > **Phonebook**

Press	To
1 	scroll to the entry you want to call
2 	send the call (for a phone number)
	or
	open a new message form with the entry's address in the To field (for email entries)

Voice Dial

To call a number or send an email using voice dial:

Do This	Result
Press and release the voice key, and speak the entry's name (within two seconds).	Your Personal Communicator finds the entry, repeats the voice name, pauses two seconds, then places the call (for a phone number) or opens a new message form (for an email address).



You can use your Personal Communicator to tune, store presets, and listen to FM radio stations when the optional Motorola Original™ FM Stereo Radio Headset accessory is plugged into the Personal Communicator's accessory connector port.

Turning the Radio On and Off

Press	To
Radio ()	turn the radio on and off

Alternatively, you can use the following procedure:

Press	To
1 ()	open the menu
2 ()	scroll to Radio
3 On () or Off ()	turn the radio on or off

Note: The **Radio** () soft key option and **Radio** menu feature are displayed only when the FM Stereo Radio Headset is plugged into the accessory connector port.

Tuning a Station

Do This	To
Press 	scroll up or down to the next frequency
or	
Press and hold 	scroll up or down to the next available stereo station

Storing a Preset

To store a station to a preset that you can recall later:

Do This	To
Press and hold a number key ( to )	assign its preset number to the tuned station

Selecting a Preset

To select a preset radio station:

Press	To
a number key ( to )	tune the station stored at that preset location



Sending and Receiving Calls With the Radio On

Your Personal Communicator interrupts the radio signal and rings or vibrates as usual to notify you of an incoming call, message, or other event. When you receive a call:

Do This	To
Press IGNORE (○)	ignore the call
Press ANSWER (○) or Press the button on the FM Stereo Radio Headset microphone	answer the call Note: You can use the FM Stereo Radio Headset microphone to converse with the other party during a call.

To end the call and resume the FM broadcast:

Do This	To
Press (end) or Press and hold the button on the headset microphone	end the call

Turn the radio off before dialing outgoing calls. You do not have to turn off the FM radio feature to dial emergency numbers or numbers selected from your phonebook or other lists.

Tip: To dial a recently called number, press (send) or the button on the FM Stereo Radio Headset microphone to go to the dialed calls list.

Messages—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 Personal Communicator. Contact your service provider for more details.

Storing Your Voicemail Number

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

Find the Feature



> Messages



> VoiceMail Setup

Press

To

1 keypad keys

enter the phone number for your voicemail

2 OK (⏏)

store the number

Receiving a New Voicemail Message

When you receive a voicemail message, your Personal Communicator displays **New VoiceMail** . (Some networks only indicate when you have messages, whether they are new or not.) If reminders are turned on, your Personal Communicator sends a reminder every five minutes until you close the new message notification, listen to the message, or turn off your Personal Communicator.



From the new message notification:

Do This	To
Press CALL ()	call your voicemail phone number and listen to the message

Listening to a Voicemail Message

To listen to your voicemail messages at any time:

Find the Feature



> **Messages** > **VoiceMail**

Your Personal Communicator calls the voicemail phone number you stored. If you do not have a voicemail number stored, the Personal Communicator guides you through storing a number.

Voice Notes

The voice note feature lets you record personal messages. You can play back a voice note at any time.

There are no pre-recorded voice notes on your Personal Communicator.

Recording a Voice Note

Your Personal Communicator can store a total of two minutes of voice note recordings. (That is, the combined recording time of all voice notes cannot exceed two minutes.)

Use this procedure to record a voice note when the idle display is visible, or use it during a Personal Communicator call to record the call. Your Personal Communicator plays an alert tone to notify the other party that the call is being recorded.

Note: Recording phone calls is subject to varying state and federal laws regarding privacy and recording of conversations.

Tip: Record your voice note in a quiet location. Hold the Personal Communicator about four inches (10 centimeters) from your mouth and speak directly into its microphone in a normal tone of voice.

Do This	Result
1 Press and hold the voice key on the front of your Personal Communicator for the duration of the recording.	A tone sounds in the earpiece and the Personal Communicator displays the Recording Voice Note message.



Do This	Result
2 Speak your voice message into the Personal Communicator.	The Personal Communicator records the message and displays a recording timer.
3 Release the voice key to stop recording.	The Personal Communicator displays the voice notes list number and the total recording time.

Playing a Voice Note

To play a recorded voice note:

Find the Feature



> Voice Notes

Press	To
1	scroll to the voice note
2 PLAY ()	play the voice note

When a Motorola Original™ headset accessory or FM radio headset accessory is attached to your Personal Communicator, voice note playback is automatically routed to the headset.

Tip: You can play a voice note while taking a call. It won't be transmitted to the other party.

Micro-Browser



The micro-browser enables you to access Web pages on your Personal Communicator. Contact your service provider to set up access, if necessary.

Starting a Micro-Browser Session

To open the micro-browser:

Find the Feature



> Browser

The micro-browser displays the home page set up by your service provider.

Press	To
1 	scroll to a bookmark or service
2 SELECT ()	select the service

Shortcut: If you open a text message with a Web address (URL) in it, you can go directly to the URL by selecting  > **Go To**.

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



Interacting With Web Pages

You can perform the following operations on a Web page:

Do This	To
Press ⏮	scroll through a text message
Press ⏮ and then SELECT (⏏)	scroll through and select items in a list
Press keypad keys and then OK (⏏)	enter requested information
Press ⏮ to scroll to a phone number on a Web page, then press	call the number from the micro-browser
Press ⏭	go back to the previous Web page

Adjusting Your Settings

You can adjust a wide variety of Personal Communicator settings to suit your needs.

Ring/Vibrate

Your Personal Communicator rings or vibrates to notify you of an incoming call, message, or other event. This ring or vibration is called an *alert*. You can use a standard alert for all events, or set different alert types for different events. The alert setting indicator in your display shows the current standard alert setting:

 Loud ring

 Soft ring

 Vibrate

 Ring and vibrate

 Silent

Select a Ring/Vibration for All Events

Find the Feature

 > Settings > Ring/Vibrate
> Alert

Press	To
1 	scroll to the alert you want to use
2 SELECT ()	select the alert
The Personal Communicator displays the Changed: Alert message.	



Select a Ring/Vibration for a Specific Event

You can select the alert that your Personal Communicator uses for a specific event (such as an incoming call) from 32 different preset tones and vibrations. When you select a ring or vibration alert for a *specific* event, it overrides the default alert set for *all* events.

Tip: This feature also lets you set the ringer volume and keypad volume.

Find the Feature

 > Settings > Ring/Vibrate
> Alert Detail

Press	To
1 	scroll to the event for which you want to set a new alert
2 CHANGE ()	select the event The Personal Communicator displays the list of available alerts.
3 	scroll to the alert you want for the event
4 SELECT ()	select the alert The Personal Communicator displays the Changed: Event Alert message.

Reordering Menu Items

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

Adjusting Your Settings

Find the Feature

 > **Settings**
> **Other Settings**
> **Personalize** > **Main Menu**

Press	To
1 	scroll to the menu item you want to move
2 GRAB ()	grab the menu item you want to move
3 	move the item up or down the menu
4 INSERT ()	insert the item in the new location

Customizing a Soft Key Function

You can relabel the soft keys to access different main menu items from the idle display.

Find the Feature

 > **Settings** > **Other Settings**
> **Personalize** > **Keys**

Press	To
1 	scroll to Left or Right
2 CHANGE ()	open the key editor
3 	scroll to the new key function
4 CHANGE ()	confirm the new function The key will have the new function whenever the Personal Communicator is idle.



Assigning a New Code or Password

Your Personal Communicator's four-digit unlock code is originally set to 1234, and the six-digit security code to 000000, at the factory. Your service provider may reset these numbers before you receive your Personal Communicator.

If your service provider has *not* reset these numbers, you should change them to prevent other users from accessing your personal information or modifying your Personal Communicator 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.

Locking and Unlocking Your Personal Communicator

You can lock your Personal Communicator manually or set your Personal Communicator to lock automatically whenever you turn it off.

When you try to use a locked Personal Communicator, it asks you to enter the unlock code. A locked Personal Communicator still rings or vibrates for incoming calls or messages, *but you must unlock it to answer.*

You can make emergency calls on your Personal Communicator even when it is locked. See "Dialing an Emergency Number When the Personal Communicator Is Locked" on page 38.

Locking Manually

Find the Feature



> Settings > Security
> Phone Lock > Lock Now

Press	To
1 keypad keys	enter your four-digit unlock code
2 OK (●)	lock the Personal Communicator

Locking Automatically

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

Find the Feature



> Settings > Security
> Phone Lock
> Automatic Lock > On

Press	To
1 keypad keys	enter your four-digit unlock code
2 OK (●)	set the Personal Communicator to lock automatically



Unlock Your Personal Communicator

At the **Enter Unlock Code** prompt:

Press	To
1 keypad keys	enter your four-digit unlock code The unlock code is originally set to 1234.
2 OK (○●)	unlock your Personal Communicator

Locking and Unlocking Your Keypad

You can lock your Personal Communicator keypad to prevent accidental use. This feature is useful in situations where an accidental keypress might inadvertently dial an emergency number or one-touch dial number (for example, when carrying your Personal Communicator in a purse or pocket).

Press	To
 	lock or unlock your keypad

Note: Incoming calls and messages unlock the keypad.

PRELIMINARY

Troubleshooting

Check these questions first if you have problems with your Personal Communicator:

Question	Answer
Is your Personal Communicator set up correctly?	Press   . If you do not see your phone number, contact your service provider.
Is your battery charged? Do you see  in the display?	The battery level indicator should have at least one segment showing (). If it does not, recharge your battery. (See "Charging the Battery" on page 18 and "Battery Use" on page 25.)
Does the handset have a signal? Do you see  in the display?	Make sure that your antenna is fully extended (if applicable). The signal strength indicator should have at least one segment showing (). If it does not, move to an area with a stronger signal to use your Personal Communicator.
Is the earpiece volume too low or does the Personal Communicator not ring?	Press the upper volume key on the front of the Personal Communicator.

Troubleshooting

Question	Answer
Has the Personal Communicator been damaged, dropped, or gotten wet?	Dropping your Personal Communicator, getting it wet, or using a non-Motorola battery or battery charger can damage the Personal Communicator. The Personal Communicator's limited warranty does not cover liquid damage or damage caused from using non-Motorola accessories.
Was a non-Motorola battery or battery charger used?	

The following refer to specific problems:

Problem	Solution
I pressed the power key, but nothing happened.	Be sure to press and hold  the power key until the display appears and you hear an audible alert (this could take a couple of seconds). If nothing happens, check that a charged battery is installed. (See "Installing the Battery" on page 17.)
The display says: Enter Unlock Code. How do I unlock my Personal Communicator?	Enter the factory-preset unlock code (1234), or the last four digits of your phone number. (See "Locking and Unlocking Your Personal Communicator" on page 83.) If this fails, call your service provider (the company that sends you your monthly wireless service bill).



Problem	Solution
I cannot send/receive calls.	Make sure that you have a phone signal (see the "Signal Strength Indicator" item on page 23). Avoid electrical or radio interference, and obstructions such as bridges, parking garages, or tall buildings. Your Personal Communicator also may have the Restrict Calls feature turned on. If you know the unlock code, you can change this setting in the security menu (menu > Settings > Security).
I cannot open my inbox.	Before you can use text or information services messages, you must set up the appropriate inbox. See "Setting Up the Text Message Inbox" on page 27.
My Personal Communicator's display is too dark.	You can use the Contrast Setting feature (see page 63) to change the level of contrast in your Personal Communicator display. You can also use the Backlight feature (see page 62) to change the length of time that your Personal Communicator's backlight display stays on.

Troubleshooting

Problem	Solution
I am unable to record a voice note or voice name.	Try moving to a quieter location to make your voice recording. Hold the Personal Communicator about four inches (10 centimeters) away from your mouth, and speak directly into your Personal Communicator's microphone in a normal tone of voice.
I launched the micro-browser but the display says: Service Not Available.	You may be in an area without service. If you have wireless service, look in the display for the digital signal indicator (□). If you do not see the indicator, you may be in an area that has only analog service or no service at all. If you see the digital signal indicator, you may be connected to a digital network that does not support Internet access.
I launched the micro-browser but the display says: Data Server Unavailable.	Try again in a few minutes. The servers may be temporarily busy.

Specific Absorption Rate Data

This model 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 U.S. Federal Communications Commission for the United States 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 antenna, 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 1.27 W/kg^2 , and when worn on the body, as described in this user guide, is 1.24 W/kg^2 (Body-worn measurements differ among phone models, depending upon available accessories and regulatory requirements). 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.

The FCC and Industry Canada have granted an Equipment Authorization for this model phone with all reported SAR levels evaluated as being in compliance with the FCC and Health Canada RF exposure guidelines. SAR information on this model phone is on file with the FCC and can be found under the Display Grant section of:

<http://www.fcc.gov/oet/fccid>

after searching on FCC ID IHDT56AS1. You may also refer to Motorola's Web site:

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



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

ITC01-064

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.

FDA020400

Warranty

Limited Warranty for Motorola Personal Communications Products Purchased in the United States and Canada

I. What This Warranty Covers

- Products. Defects in materials and workmanship in wireless cellular telephones, pagers, and/or two-way radios, and certain accessories that are sold with them, such as the battery, battery charger and holster manufactured and/or sold by Motorola (Products).
- Batteries. Defects in materials and workmanship in batteries that are manufactured by Motorola and/or sold with Products are covered by this warranty only if the fully-charged capacity falls below 80% of rated capacity or they leak.
- Software. Physical defects in the media that tangibly embodies each copy of any software supplied with the Products.

II. What the Period of Coverage Is

From the date the Products are purchased by the first end-user:

- Products. The warranty is for one year. Exception: The warranty for Spirit GT series and Talkabout series two-way radio accessories is for 90 days.
- Software. The warranty is for 90 days.
- Repairs/Replacements. The warranty is for the balance of the original warranty or for 90 days from the date you receive it, whichever is longer.

III. Who is Covered

This warranty extends to the first end-user purchaser, only.

IV. What We Will Do to Correct Warranty Problems

At no charge to you, we have the option to repair or replace the Products or software that do not conform to the warranty, or to refund the Products' purchase price. We may use functionally equivalent reconditioned/refurbished/pre-owned or new Products or parts. No software updates are provided.

V. How to Get Warranty Service

Please call:

USA

Cellular 1-800-331-6456

Paging 1-800-548-9954

Two-Way 1-800-353-2729

TTY (Text Telephone) 1-888-390-6456

Canada

All Products 1-800-461-4575

TTY (Text Telephone) 1-888-390-6456

You will receive instructions on how to ship the Products to Motorola. You must ship the Products to us with freight, duties and insurance prepaid. Along with the Products 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 this Product requires subscription service); (d) the name and location of the installation facility (if applicable) and, most importantly; (e) your address and telephone number. If requested, you must also

return all detachable parts such as antennas, batteries and chargers. RETAIN YOUR ORIGINAL PROOF OF PURCHASE.

We will ship repaired or replacement Products at our expense for the freight and insurance, but at your expense for any duties. If additional information is needed, please contact us at the telephone number listed above.

VI. What This Warranty Does Not Cover

- Products that are operated in combination with ancillary or peripheral equipment or software not furnished by Motorola for use with the Products ("ancillary equipment"), or any damage to the Products or ancillary equipment as a result of such use. Among other things, "ancillary equipment" includes batteries, chargers, adaptors, and power supplies not manufactured or supplied by Motorola. Any of these voids the warranty.
- Someone other than Motorola (or its authorized service centers) tests, adjusts, installs, maintains, alters, modifies or services the Products in any way. Any of these voids the warranty.
- Rechargeable batteries that: (a) are charged by other than the Motorola-approved battery charger specified for charging such batteries; (b) have any broken seals or show evidence of tampering; (c) are used in equipment other than the Product for which they are specified; or (d) are charged and stored at temperatures greater than 60 degrees centigrade. Any of these voids the warranty.
- Products that have: (a) serial numbers or date tags that have been removed, altered or obliterated; (b) board serial numbers that do not match each other, or board serial numbers that do not match the housing; or (c)

Warranty

nonconforming or non-Motorola housings or parts. Any of these voids the warranty.

- Defects or damage that result from: (a) use of the Products in a manner that is not normal or customary; (b) improper operation or misuse; (c) accident or neglect such as dropping the Products onto hard surfaces; (d) contact with water, rain, extreme humidity or heavy perspiration; (e) contact with sand, dirt or the like; or (f) contact with extreme heat, or spills of food or liquid.
- Physical damage to the surface of the Products, including scratches, cracks or other damage to a display screen, lens or other externally exposed parts.
- Failure of Products that is due primarily to any communication service or signal you may subscribe to or use with the Products.
- Coil cords that are stretched or that have any broken modular tabs.
- Products that are leased.

Flat-rate repair rates may apply to Products not covered by this warranty. To obtain information about Products needing repairs that are not covered by this warranty, please call the telephone number previously listed. We will provide information on repair availability, rates, methods of payment, where to send the Products, etc.

VII. Some Other Limitations

This is Motorola's complete warranty for the Products, and states your exclusive remedies. This warranty is given in lieu of all other express warranties. Implied warranties, including without limitation, the implied warranties of merchantability and fitness for a

particular purpose, are given only if specifically required by applicable law. Otherwise, they are specifically excluded.

No warranty is made as to coverage, availability, or grade of service provided by the Products, whether through a service provider or otherwise.

No warranty is made that the software will meet your requirements or will work in combination with any hardware or applications software products 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.

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, 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, or other financial loss arising out of or in connection with the ability or inability to use the Products, to the full extent these damages may be disclaimed by law.

VIII. Patent and Software Provisions

At Motorola's expense, we will defend you, and pay costs and damages that may be finally awarded against you, to the extent that a lawsuit is based on a claim that the Products directly infringe a United States patent. Our obligation is conditioned on:

- (a) you notifying us promptly in writing when you receive notice of the claim;
- (b) you giving us sole control of the defense of the suit and all negotiations for its settlement or compromise; and
- (c) should the Products become, or in Motorola's opinion be likely to become, the subject of a claim of infringement of a

United States patent, you permit us, at our option and expense, either to: procure for you the right to continue using the Products; replace or modify them so that they become non-infringing; or grant you a credit for such Products, as depreciated, and accept their return. The depreciation will be an equal amount per year over the lifetime of the Products, as established by Motorola.

Motorola will have no liability to you with respect to any claim of patent infringement that is based upon the combination of the Products or parts furnished under this limited warranty with ancillary equipment, as defined in VI., above.

This is Motorola's entire liability with respect to infringement of patents by the Products.

Laws in the United States and other countries preserve for Motorola and other third party software providers certain exclusive rights for copyrighted software, such as the exclusive rights to reproduce in copies and distribute copies of such software. The software may be copied into, used in and redistributed with only those Products that are associated with such software. No other use, including without limitation, disassembly or reverse engineering of such software or exercise of exclusive rights in such software is permitted.

IX. State Law and Other Jurisdiction Rights

Some states and other jurisdictions do not allow the exclusion or limitation 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, which vary from jurisdiction to jurisdiction.

Warranty

To obtain information on Motorola Personal Communications Products, including warranty service, accessories and optional Extended Warranties on selected Products, please call:

USA

Cellular 1-800-331-6456

Paging 1-800-548-9954

Two-Way 1-800-353-2729

TTY (Text Telephone) 1-888-390-6456

Canada

All Products 1-800-461-4575

TTY (Text Telephone) 1-888-390-6456

To correspond with Motorola about the Products, please write us at <http://www.motorola.com> or at:

In the USA:

Motorola, Inc.

600 North U.S. Highway 45

Libertyville, IL 60048

In Canada:

Motorola Canada Limited

5875 Whittle Road

Mississauga, ON L4Z 2H4

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

A

accessories

 optional 9, 71

 standard 17

alert

 defined 80

 indicators 24, 80

 setting 80

 type, selecting 81

alert setting indicator 24, 80

animation 62

application, locking 60

Attach Number feature 40

auto PIN dial 62

automatic redial

 activating 62

 using 37

B

backlight 62

banner text 61

battery

 charging for first time
 18–19

 charging with car kit 64

 extending battery life
 25–26, 62

 installing 17–18

 level indicator 24

 meter 58

block cursor, defined 47

browse text mode 48

browser alerts 56

browser. *See* micro-browser 57

C

call

 alert type, selecting 81

 alert, setting 80

 answer options 59

 answering 21

 attaching phone number to
 prefix digits 40

 call waiting 42

 calling card 41

 data call, setting 59

 dialed calls list 41, 54

 emergency number 38

 ending 20

 fax call, setting 59

 in-call timer 59

 incoming call type, setting
 59

 muting 43

 placing 20

 received calls list 41, 53

 receiving 21

 restricting 60

- sending 20
- three-way call 42–43
- voice dial 41
- call timers 54
- call waiting 42
- caller ID 38
- calling card call 41
- calling line identification. *See* caller ID
- car kit 64
- charging with car kit 64
- clock 24
- contrast 63
- cursor 47
- customer service, calling 56
- customizing the menu 81

D

- data call
 - connecting to external device 58
 - incoming call format, setting 59
- date, setting 62
- default passwords 83
- dialed calls list 41, 54
- digital/analog signal indicator 24
- display
 - animation 62
 - backlight 62

- banner text 61
- contrast 63
- described 22–24
- greeting 61
- idle display 22
- language 62
- zoom 24–25, 62
- drafts folder 57
- DTMF tones 43, 63

E

- earpiece
 - volume, adjusting 25
- emergency number 38
- end key
 - functions 20
 - menu functions 44
- ending a call 20
- Enter Unlock Code** message 85
- event alert 81

F

- fax call
 - connecting to external device 58
 - incoming call format, setting 59
- flashing cursor, defined 47
- FM radio headset 56, 71
- for hands-free use 64

G

greeting, display 61

H

hands-free use 64

headset

FM radio 56, 71

for hands-free use 64

I

idle display, defined 22

in use indicator 23

inbox, text message 27

in-call timer 59

Incoming Call message 38

incoming call type 59

indicators

alert setting 24, 80

battery level 24

digital/analog signal 24

in use 23

menu 22

message waiting 23

ring alert 24, 80

roam 23

signal strength 23

silent alert 24, 80

vibrate alert 24, 80

voice message waiting 23

voice name 65

iTAP software

activating 51

entering words 51–52

K

key

end 20, 44

left soft key 82

lock 85

menu 1, 21, 44

power 19

right soft key 1, 44, 82

scroll 44

send 1, 20, 21

voice 1, 69, 76–77

volume control 1, 44

keypad volume 81

keypad, answering calls with
59

L

language 62

left soft key

customizing 82

lock

applications 60

keypad 85

phone 83–85

lock application feature 60

loud ring alert 24, 80

M

making a call 20

master clear 63

master reset 63

menu

 customizing 81–82

 entering text 48–52

 features 53–57

 language, setting 62

 locking applications 60

 navigating 8, 44–45

Phonebook Menu 55, 65

Quick Note Menu 33–34

 rearranging features 81–82

 scroll feature 62

Text Msg Menu 30

 using features 8, 45–47

menu indicator 22, 24

menu key 1, 21, 44

message

 deleting 29–30

 drafts folder 57

 inbox setup 27–28

 locking 29–30

 outbox 57

 quick note 33–36, 56

 reading 29–30

 reminders 28, 74

 text 27–31, 56

 voicemail 56, 74–75

message waiting indicator 23

micro-browser

 browser alerts 56

 call a number from 79

 defined 57, 78

 functions 79

 go to previous page 79

 starting 78

muting a call 43

my telephone number 43, 58

N

'n' character 41

network settings 63

notepad 54

numeric text mode 48

O

one-touch dialing 39–40

optional accessory, defined 9

optional feature, defined 9

outbox 57

P

passwords

 changing 61, 83

 default 83

pause character 41

phone

 accessories, optional 9

 accessories, standard 17

- answer options 59
 - connecting to external device 58
 - date, setting 62
 - feature specifications 58
 - keypad, locking and unlocking 85
 - language, setting 62
 - locking 83–85
 - muting a call 43
 - network settings 63
 - one-touch dialing 39–40
 - passwords 61, 83
 - specifications 58
 - speed dial, using 39
 - time, setting 62
 - turning on/off 19
 - unlocking 19, 83–85
 - voice dial 41
 - phone number
 - attaching to prefix digits 40
 - redialing 37
 - viewing your own 21, 43
 - voice dial 41
 - phonebook
 - attaching phone number to prefix digits 40
 - dialing an entry number 69
 - entry name 65
 - fields 65
 - number type indicator 65
 - one-touch dialing 39–40
 - phone number 65
 - speed dial number 39, 65, 67
 - speed dial, using 39
 - storing an entry 66–68
 - voice name entry 68–69
 - voice name indicator 65
 - Phonebook Menu** 55, 65
 - PIN code, dialing automatically 62
 - power key 19
 - predictive text entry
 - activating 51
 - entering words 51–52
- ## Q
- quick dial
 - setting number 61
 - using 56
 - quick note 33–36, 56
 - Quick Note Menu** 33–34
- ## R
- radio 56, 71–73
 - received calls list 41, 53
 - receiving a call 21
 - recent calls
 - attaching phone number to prefix digits 40

- menu description 53
- redial
 - automatic redial 37
 - busy number 37
- reminders
 - text message 28
 - voicemail message 74
- restricting calls 60
- right soft key
 - customizing 82
 - functions 1, 44
- ring alert
 - indicators 24, 80
 - setting 80
 - type, selecting 81
- ringer volume 25, 81
- roam indicator 23

S

- scroll feature 62
- scroll keys 44
- send key 1, 20, 21
- sending a call 20
- short message service. *See* text message
- signal strength indicator 23
- silent alert indicator 24, 80
- SMS. *See* text message
- soft keys
 - customizing 61, 82
- soft ring alert 24, 80

- speed dial
 - changing number 67
 - number, defined 39
 - using 39
- standby time, increasing 26

T

- tap method text entry 49–50
- text
 - block cursor 47
 - browse mode 48
 - changing text mode 48
 - character chart 50
 - entering from keypad 48–52
 - flashing cursor 47
 - iTAP software predictive text entry 50–52
 - numeric mode 48
 - tap method 49–50
 - text message 27–31, 56
 - text mode, changing 48
- Text Msg Menu** 30
- three-way call 42–43
- time, setting 62
- timers 54
- travel charger 18

U

- unlock
 - keypad 85

phone 83–85

V

vibrate alert

indicator 24, 80

setting 80

type, selecting 81

voice dial

dialing a number 41, 70

recording voice name
68–69

voice key

dialing a number 41

functions 1

recording a voice name 69

recording a voice note
76–77

voice message waiting indicator
23

voice name

defined 68

phonebook indicator 65

recording 68–69

voice note

defined 76

playing 77

recording 76–77

total recording time 76

voicemail 56, 74–75

volume

earpiece 25

keypad 81

ringer 25, 81

volume keys 1, 25, 44

W

wait character 41

warranty 103–109

Web pages

functions 79

viewing 78

Z

zoom setting 24–25, 62

U.S. patent Re. 34,976

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.

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

