

INSTRUCTION MANUAL

The following is a draft copy of the instruction manual.

TDMA StarTAC

Cellular Telephone

User Manual

Engineering Review—April 6, 1999

Welcome

All Motorola digital cellular phones are designed and manufactured to meet Motorola's rigorous specifications and world-class quality standards. During development, our laboratory testing team took the Digital StarTAC™ cellular phone through rigorous durability tests including temperature, humidity, shock, dust, vibration, and drop tests—and the phone still worked! We are confident that the phone you purchased will meet your own exacting standards.

Thank you for choosing Motorola, a global leader in communications technology. Enjoy your Digital StarTAC™ phone.

Contents

Welcome	3
Safety Information	7
Overview	12
Package Content Options	12
Phone Overview	13
Understanding the Guide	14
Using the Battery	15
About Your Batteries	15
Removing and Attaching Battery Covers	17
Installing and Removing Batteries	18
Checking Battery Levels	19
Charging Batteries	20
Using the Phone	24
Turning the Phone On and Off	24
Reading the Indicators	25
Standby Mode	27
Holding Your Phone	27
Storing Your Phone in Its Holster	28
Placing a Call	28
Ending a Call	28
Viewing Your Own Number	29
Receiving a Call	29
Switching Between Digital and Analog Modes	29
Using the Smart Button	30
Redialing a Number	31
Controlling Volume	32
Using Memory	33
Using Your Phone's Built-in Phone Book	34
Storing Names and Numbers	34
Recalling an Entry by Name	36
Recalling an Entry by Memory Location	36
Clearing a Memory Entry	37
Shortcuts for Recalling Phone Book Entries	37
Making Notes on the Scratchpad	38
Using the Menu System	39

Navigating the Menu	39
Road Maps	40
Managing the Phone Book	41
Road Map for Phone Book	42
Recalling an Entry by Name	43
Recalling an Entry by Location	43
Storing with the Menu	44
Storing and Placing Numbers With Pause Dialing	45
Storing and Placing Numbers for Calling Card	
Information	47
Editing a Memory Location	50
Viewing Your Own Number	52
Phone Book Display Preferences	53
Timing Your Calls	54
Road Map for Call Timers	55
Viewing the Individual Call Timer	56
Viewing the Resettable Call Timer	56
Viewing the Cumulative Timer	57
Resetting the Timer	57
Displaying the Individual Timer Automatically	58
Setting the One-Minute Audible Timer	58
Setting the Repeating Audible Timer	59
Setting the Single Timer	59
Adjusting Tone Controls	61
Road Map for Tone Controls	62
Using Call Alert Tones	63
Selecting a Ringer Style	64
Using Message Alert Tones	64
Turning Keypad Tones On and Off	65
Turning Scratchpad Tones On and Off	65
Using Lock/Security Features	67
Road Map for Lock Security	68
Activating Voice Privacy	69
Locking/Unlocking Your Phone	70
Activating Priority Calling	71
Managing Security Options	72
Customizing Phone Features	79
Road Map for Phone Options	80
Selecting Call Mode Preference	81

Switching Between Numbers	82
Selecting a Cellular System	83
Reviewing Feature Settings	84
Blocking Incoming Calls	85
Activating Automatic Hands-Free	85
Activating Multiple Key Answer	86
Activating Open to Answer	86
Activating Automatic Answer	87
Selecting Battery Options—Power Save Mode	88
Displaying System Identification	88
Selecting Language	89
Using the Message Center	90
Road Map for Message Center	91
Using Short Messaging	92
Using Voice Mail	97
Using Caller ID	97
Setting the Scrolling Speed	100
Selecting Message Key Options	100
Reference Information	102
Accessory Options	102
Troubleshooting	105
Index	108
Patent Information	112

Safety Information

Important: Read this information before using your wireless handheld phone.

Exposure to Radio Frequency Signals

Your wireless handheld portable telephone is a low power radio transmitter and receiver. When it is ON, it receives and also sends out radio frequency (RF) signals.

In August 1996, The Federal Communications Commissions (FCC) adopted RF exposure guidelines with safety levels for handheld wireless phones. Those guidelines are consistent with safety standards previously set by both U.S. and international standards bodies:

- American National Standards Institute (ANSI) IEEE. C95. 1-1992
- National Council on Radiation Protection and Measurement (NCRP) Report 86
- International Commission on Non-Ionizing Radiation Protection (ICNIRP) 1996

Those standards were based on comprehensive and periodic evaluations of the relevant scientific literature. For example, over 120 scientists, engineers, and physicians from universities, government health agencies, and industry reviewed the available body of research to develop the ANSI Standard (C95.1).

The design of your phone complies with the FCC guidelines (and those standards).

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.

Phone Operation

Normal Operation

Hold the phone as you would any other telephone, with the antenna pointed up and over your shoulder.

Tip on Efficient Operation

To operate your phone most efficiently, do not touch the antenna unnecessarily when the phone is in use. Contact with the antenna affects call quality and may cause the phone to operate at a higher power level than otherwise needed.

Batteries

Caution: All batteries can cause property damage, injury, or burns if a conductive material, such as jewelry, keys or beaded chains, touches exposed terminals. The material may complete an electrical circuit and become quite hot. To protect against such unwanted current drain, exercise care in handling any charged battery, particularly when placing it inside your pocket, purse, or other container with metal objects. When the battery is detached from the phone, your batteries are packed with a protective battery cover; please use this cover for storing your batteries when not in use.

Driving

Check the laws and regulations on the use of wireless telephones in the areas where you drive. Always obey them. Observe the following guidelines when using your phone while driving.

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

Electronic Devices

Most modern electronic equipment is shielded from RF signals. However, certain equipment may not be shielded against the RF signals from your wireless phone.

Pacemakers

The Health Industry Manufacturers Association recommends that a minimum separation of six inches (6") be maintained between a handheld wireless phone and a pacemaker to avoid potential interference with the pacemaker. These recommendations are consistent with the independent research by and recommendations of Wireless Technology Research.

Persons with pacemakers:

- should ALWAYS keep the phone more than six inches from their pacemaker when the phone is turned ON
- should not carry the phone in a breast pocket
- should use the ear opposite the pacemaker to minimize the potential for interference
- should turn the phone OFF immediately if you have any reason to suspect that interference is taking place

Hearing Aids

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

Other Medical Devices

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

Turn your phone OFF in health care facilities when any regulations posted in these areas instruct you to do so. Hospitals or health care facilities may be using equipment that could be sensitive to external RF energy.

Vehicles

RF signals may affect improperly installed or inadequately shielded electronic systems in motor vehicles. Check with the manufacturer or its representative regarding your vehicle. You should also consult the manufacturer of any equipment that has been added to your vehicle.

Posted Facilities

Turn your phone OFF in any facility where posted notices so require.

Aircraft

FCC regulations prohibit using your phone while in the air. Switch OFF your phone before boarding an aircraft.

Blasting Areas

To avoid interfering with blasting operations, turn your phone OFF when in a “blasting area” or in areas posted: “Turn off two-way radio.” Obey all signs and instructions.

Potentially Explosive Atmospheres

Turn your phone OFF and do not remove your battery when you are in any area with a potentially explosive atmosphere. Obey all signs and instructions.

Sparks from your battery in such areas could cause an explosion or fire resulting in bodily injury or even death.

Areas with a potentially explosive atmosphere are often but not always clearly marked. They include, but are not limited to: fueling areas such as gasoline stations; below deck on boats; fuel or chemical transfer or storage facilities; areas where fuel odors are present (for example, if a gas/propane leak occurs in a car or home); areas where the air contains chemicals or particles, such as grain, dust, or metal powders; and any other area where you normally would be advised to turn off your vehicle engine.

For Vehicles Equipped with an Air Bag

An air bag inflates with great force. Do NOT place objects, including both installed or portable wireless equipment, in the area over the air bag or in the air bag deployment area. If in-vehicle wireless equipment is improperly installed and the air bag inflates, serious injury could result.

US050498REV

Overview

Package Content Options

Your Digital StarTAC™ cellular phone is typically packed with a transformer charger and at least one battery. Below is a sampling of the different package options.

Note: Your phone and accessories may not look exactly as pictured.



Digital StarTAC™
Cellular



Slim Main Battery
with Battery



Standard Main
Battery with Battery



AC Adapter



Slim Auxiliary
Battery



NEW
Holster



Cigarette Lighter



Heads



NEW Desktop Charger
(AC Adapter required)

Phone Overview

See the inside front cover of this guide for a diagram of the components described below.

Antenna—Provides superior connectability. Does not extend.

Earpiece—Ultra-compact phone speaker.

Accessory Connector Port—Provides the connections for an external power supply and vehicular and data accessories.

Headset Jack—Provides the connection for an optional headset.

Microphone—Positioned for convenient conversation.

Function Keys

 **Pwr**—Turns the phone On and Off.

 **Fcn**—Acts as a “shift” key to access the secondary functions of other keys.

 **Rcl**—Recalls phone numbers from memory.

 **Sto**—Stores phone numbers into memory.

 **Clr**—Clears characters from the screen.

 **End**—Ends phone calls.

 **Send**—Places or answers calls.

 ***** and  **#**—Can be used to scroll through memory entries and menu features.

 **Message Center Button**—Allows access to digital messages, voice mail messages, and Caller Line ID.

 **Smart Button**—Use the Smart Button to recall information from memory, place and end calls, select menu features, and toggle features on and off. The symbol “” in your display represents the Smart Button.

 **or**  **Volume Keys**—The upper and lower volume keys can adjust keypad, earpiece, and ringer

volume. After pressing the Smart Button, the volume keys also scroll through memory entries and menu features.

Understanding the Guide

Key Presses

Key presses are represented in this guide using symbols so that you may locate and use the required sequence quickly. A sequence of key presses may be shown as follows:



This means you should press **Fcn** followed by **0**, **7**, and then **Clr**, in sequence, not simultaneously.

Prompts and Messages

Your phone responds to key presses by displaying either a prompt that guides you to the next action or a message confirming that your action is complete. Prompts and messages are represented in this guide in LCD style, for example: `Reset Timer`.

Short Cuts and Tips

In the margins of your guide are short cuts and useful hints and ways to improve your phone's performance. These are especially helpful for experienced Motorola Users, who can find many of the same key sequences used with other Motorola models.

Using the Battery

About Your Batteries

Your Digital StarTAC™ phone can use either Lithium Ion (LiIon) or Nickel Metal Hydride (NiMH) batteries. Batteries are available in these sizes: Slim, Standard, and Extra Capacity.

Your phone can use two batteries at the same time. You can use any single battery or battery combination to fit your needs. You can even extend your talk-time by attaching an auxiliary battery at any time, without interrupting your call.

All times are approximate and depend on network, signal strength, and the function selected.

Battery Talk-Time and Standby-Time

Talk-time refers to the time you can talk on your phone before the battery is fully discharged.

Standby-time is the time that your phone is on but not used for talking.

Notes:

- Talking on the phone uses more power than leaving it idle. The more power you use for talking, the less you'll have for standby-time, and vice-versa.
- For a complete measure of talk-time or standby-time, simply combine the time shown for your main battery to the time shown for your auxiliary battery.
- All times depend on the battery used, network configuration, signal strength, and the features selected.
- Your phone will operate more efficiently in Digital mode. If the **D** icon is displayed, your phone's performance will be reflected in

the digital section of the table below.
Otherwise, refer to the Analog section.

The following table shows ranges for battery talk-times and standby times.

Battery	Digital		Analog	
	Talk (up to)	Standby (up to)	Talk (up to)	Standby (up to)
Slim Main LiION 500mAH	64 min.	78 hrs.	36 min.	21 hrs.
Standard Main NiMH (500mAH)				
Extra Capacity LiION 900 mAH	110 min.	135 hrs.	63 min.	36 hrs.
Slim Auxil- iary LiION 900 mAH	220 min.	270 hrs.	126 min.	72 hrs.

Storing and Disposing of Batteries

To prolong the life of your batteries, do not expose them to temperatures below -10°C (14°F) or above 45°C (113°F). Always take your phone with you when you leave your car.

To dispose of batteries, check with your local recycling center for a battery recycler near you. Never dispose of batteries in a fire.

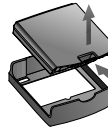
Caution: To prevent injuries or burns, do not allow metal objects to contact or short-circuit the battery terminals.

Removing and Attaching Battery Covers

Your phone's batteries are shipped uncharged and fitted with protective covers. Before you install the batteries, remove these covers, and save them for storing unused batteries. The covers prevent metal objects from contacting the battery terminals, reducing the risk of injury or damage from a battery short circuit.

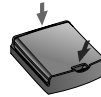
Removing the Main Battery Cover

1. Press and hold the release latch.
2. Pull the battery upward, out of its cover.



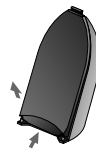
Attaching the Main Battery Cover

1. Set the edge of the battery opposite the release latch into the cover.
2. Lower the release latch side of the battery into the cover until the latch clicks into place.



Removing the Auxiliary Battery Cover

1. Hold the battery securely with one hand.
2. With the thumb of your other hand, push the base of the cover upward.
3. Continue pushing until the cover slides free of the pins on the bottom of the battery, and swing the cover away from the battery.



Attaching the Auxiliary Battery Cover

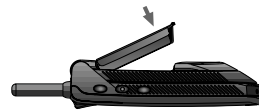
1. Slide the curved end of the cover onto the hook on top of the battery.
2. Push the cover firmly upward until the base of the cover slides past the battery pins; then release.



Installing and Removing Batteries

Installing a Main Battery

1. Set the edge of the battery opposite the release latch into the cover.
2. Press the release latch side of the battery into the cover until the latch clicks into place.

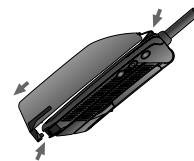


Removing a Main Battery

1. Press and hold the release latch.
2. Pull the battery upward, out of the phone.

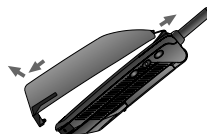
Installing an Auxiliary Battery

1. Place the hook on the battery into the slot on the back of the phone.
2. Pull the battery toward the bottom of the phone until the two pins click into place.



Removing an Auxiliary Battery

Slide the battery down until the two pins release from the base of the phone—then lift the battery off.



Checking Battery Levels

Battery Level Indicator

The three bar segments on your phone's Battery Level Indicator display the amount of charge remaining in your battery. The more segments visible, the greater the charge.

For a detailed battery level reading:

Press **Fcn** **4**.

You will see one of the following:



The more segments filled on the fuel gauge, the greater the charge.

Low Battery Warning

When the battery level is low and only a few minutes of talk-time remain, your phone signals you in three ways:

- Low Battery appears in the first line of the display.
- No bar segments are highlighted.
- A short tone plays periodically.

To confirm low battery signals:

Press **Fcn** **4**.



High



Low

Tip:
You can still place and answer calls while using either the internal charger or the cigarette lighter adapter. Remember that talking on the phone requires energy, so charging will take more time. To place the phone in charger-only mode, press  once.

Power Status Messages

You may also see one of the following messages:

Batt Auxiliary	Auxiliary and/or main batteries fitted; the phone is operating from the auxiliary battery.
Batt Main	Auxiliary and/or main batteries fitted; the phone is operating from the main battery.
Charging Auxiliary	Auxiliary and main batteries fitted; the auxiliary battery is being charged.
Charging Main	Auxiliary and/or main batteries fitted; the main battery is being charged.

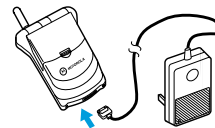
Charging Batteries

Using the Internal Charger.

Your phone has a built-in battery charger. Using either the AC or cigarette lighter adapter, you can plug the handset directly into a power source to charge any attached batteries.

To charge:

1. Plug the AC adapter or cigarette lighter adapter into the accessory connector on the bottom of your phone as shown, with the release tab facing up.
2. Plug the power adapter into a 110V AC electrical outlet. A beep-tone sounds, and the battery icon flashes.



See "Charge Times" on page 23 for charge times.

Using the Desktop Charger

You can use the desktop charger to charge batteries while they are attached to your phone, or you can charge a main battery separately.

To charge <REPLACE GRAPHIC. PHONE AND BATTERY SHOULD BE ATTACHED>:



1. Plug the AC adapter into the back of the charger, release tab facing up.
2. Plug the other end of the adapter into an AC wall socket.
3. With battery(ies) attached, place the phone into the charger's pocket.

Notes:

- The detachable plug assembly included with your package can only be used for this power supply. Do not plug it into any wall outlet without the power supply.
- When the phone is charging, the battery level indicator will flash. When the battery is fully charged, this icon will stop flashing. If your phone cannot charge the battery, this indicator will not appear.

Desktop Charger Indicator Lights

Red—indicates that the battery is charging.

Flashing yellow—indicates that the battery is waiting its turn.

Green—means the battery is charged within approximately 90% of its capacity and can be used. Charging the battery for an additional hour brings it up to 100% capacity.

Flashing red—indicates that the battery is damaged and cannot be charged.

Tip:

If both a main and auxiliary battery are attached, the main battery is charged to 90% before the auxiliary is charged.

Tip: "batt" is printed on the **4** key as a reminder.

Charging Two Batteries on the Phone

When you charge your phone with a main and auxiliary battery attached, the main battery is charged first.

To find out which battery is being charged:

Press **Fcn** **4**.

Note: If the battery cannot be charged and you press **Fcn** **4**, you will see Invalid Battery.

Battery Charging Tips

To ensure that you enjoy maximum battery life and use your battery to its fullest capacity:

- Always use Motorola approved battery chargers.
- For the best results, Li-Ion batteries should be charged using the E•P™ Desktop Charger, or your phone's internal charger.
- The battery should be at or near room temperature when charging.
- When you don't intend to use a battery for a while, store it uncharged in a cool, dark, dry place, such as a refrigerator.
- Do not leave a NiMH battery connected to any charger for longer than 24 hours.

A new NiMH battery may require several full charge/discharge cycles in order to achieve its optimum performance. After this initial charge, you can recharge your battery at your convenience, using the phone's rapid travel charger.

Quick Change Power Source ("Seamless Connection")

The quick change feature enables you to switch power sources while a call is in progress without losing the call. If you hear a low-battery warning while you are in a call, plug in the Cigarette Lighter Adapter or AC Adapter.

Charge Times

Locate your battery by type to see how long your battery takes to charge to a 95% power level:

Battery Type	Charge Time (hrs)
	Internal Charger
NiMH Main (500 mAH)	1.25
Slim LiION Main (500 mAH)	2.5
Extended LiON Main (900 mAH)	3.0
LiION Auxiliary (900 mAH)	3.0

After the battery reaches 95%, it begins to slow charge until it is fully charged. It is normal for batteries to become warm during charging.

Using the Phone

Turning the Phone On and Off

<NEW GRAPHIC WITH STUBBY ANTENNA>

1. Open your phone to expose the keypad.
2. Press and hold **Pwr** to turn the phone on. You will hear an audible alert.
3. Press and hold **Pwr** again to turn the phone off. Powering down will be displayed, and you will hear an audible alert.



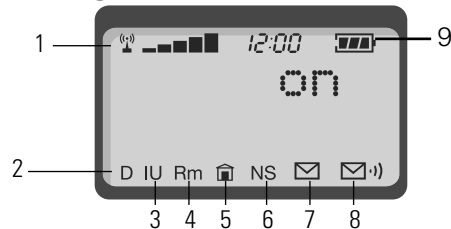
What You Will See

When you turn on your Digital StarTAC™, it performs a self-test to let you know it is operational. When the test is completed, the display shows:

- your phone number
 - the Digital or Analog icon
 - one of several possible greetings, such as the name of your Service Provider
- or**
- an indication of local coverage area (Home System) or non-local coverage (Public Room)

<ADD DISPLAY GRAPHIC, LIKE CDMA, PAGE 22-23>

Reading the Indicators



Signal Strength Indicator (1)

The Signal Strength Indicator (SSI) indicates the strength of your phone's connection with the local cellular system. A strong signal increases your chances of placing and receiving calls. Low signal strength can occur in a fringe area of the cellular system. Buildings, tunnels, and bad weather can block or interfere with reception.



Digital Indicator (2)

If you are in a digital coverage area, the digital **D** indicator flashes.

In Use Indicator (3)

The In Use (IU) Indicator flashes when a call is in progress.

Roam Indicator (4)

The Roam (Rm) Indicator lights when the phone accesses a cellular service outside your local system. When you leave your service area, your phone roams or seeks another cellular system until it finds one. If your phone finds another service of the same system type as your local service, the Roam Indicator flashes slowly. If it finds a different system type, it flashes quickly.

In-Building Indicator (5)

The In-Building Indicator (🏠) lights when the phone accesses an In-Building Cellular System or other non-public system.



High



Low



No Service Indicator (6)

If you travel beyond the range of a cellular system, the No Service (NS) Indicator flashes to let you know that calls cannot be placed or received from your location.

SMS Message Waiting Indicator* (7)

The Short Message Service (SMS) Message Waiting Indicator (☒) is displayed when the phone receives a message. The symbol flashes when your message storage area is full.

Voice Message Waiting Indicator*(8)

The Voice Message Waiting Indicator (☒) is displayed when your Voicemail has received a message.

Battery Level Indicator (9)

The three bar segments on the Battery Level Indicator show the amount of charge remaining in your battery. The more segments you see, the greater the charge. The phone alerts you to a low charge in three ways:

- No bar segments are highlighted.
- Low Battery appears on your screen.
- A short tone plays periodically.

Tone Indicator

<ADD TEXT/NEW GRAPHICS FROM CDMA PG 25>

Power/Status Indicator

While wearing your phone in its holster or carrying it, you can check the Power/Status indicator on top of the phone for status information on your current type of service and message status. The messages can include voice mails and Short Message Services (SMS) messages, or the receipt of recent calls.

*Network- and subscription-dependent feature. May not be available in all areas.

During wake-up and while the phone is “ringing,” the Power/Status Indicator flashes alternating red and green. Otherwise, if the flip is closed and the Power Save Mode is set to Off, then the Power/Status Indicator flashes according to the following chart. (See “Selecting Battery Options—Power Save Mode” on page 88 for information on the Power Save Mode.)

Service	Condition	First Flash	Second Flash
Service in home system	No message	Green	Green
	Message waiting		Red
Roaming (service in non-home system)	No message	Yellow	Yellow
	Message waiting		Red
No service	No message	Red	Off
	Message waiting		Red

Note: The Power/Status Indicator is Off when the phone is in charger-only mode.

Standby Mode

To conserve energy, your phone may turn off its lights and most indicators when in standby mode. The display comes back the next time you press a key or open the phone.

Holding Your Phone

Hold your cellular phone with the antenna fully extended and pointing up and over your shoulder. For best performance, make sure your hand is not covering the antenna.

Storing Your Phone in Its Holster

To slip your phone into its holster, make sure the main battery is facing the inside of the holster. Then clip the holster onto a belt, purse or briefcase.

Placing a Call

To place a call:

1. Press and hold **Pwr** to turn your phone on.
2. Enter the number you want to call.
 - Press **Clr** to erase one digit at a time if you make a mistake.
 - Press and hold **Clr** to clear the entire entry.
3. Press and hold **→** until you hear a second tone.

or

Press **Send** to place the call.

You will hear a two-tone alert and see **Dialing**
UUUUUU
NNNNNN.

You can dial phone numbers with up to 32 digits, but only the last 20 digits appear in the display.

Press **Rcl** to see the entire phone number.

Ending a Call

To end a call:

Press **End** or close the phone.

or

1. Press and hold **→** until you hear a second tone.

You will see **✆ To End Call**.

2. Press **→** again to end the call.

Viewing Your Own Number

To find out your phone's number:

Press **Rcd** **#**.

Receiving a Call

Your phone must be powered on to receive calls.

To answer a call:

Press **Send** or open the phone when the phone rings. Press **Send** or open the phone when the phone rings.

Note: Opening the phone will not answer the call if the Open to Answer feature is off. (See "Activating Open to Answer" on page 86.)

Unanswered Call Indicator

When you cannot take a call, your Digital StarTAC™ keeps a count of your unanswered calls and alerts you with the message **Call XX Unanswered**, where XX is the number of missed calls.

Press **Clr** or **✉** to erase the message, and you can begin placing calls again.

Ringer Suppress

You can terminate either the ring or the vibrate indicator by pressing either of the volume keys during the ring/vibrate cycle. The caller will continue to hear a ring until voice mail answers.

Switching Between Digital and Analog Modes

During a call, you can switch from digital to analog modes, or from analog to digital:

To switch modes, press **Fcn** **2**.

Your Digital StarTAC™ will select the TDMA 800 or TDMA 1.9 band digital system, depending upon availability, or the AMPS 800 band analog system.

Tip: You can also enter the menu system by pressing  .

Using the Smart Button

Use the Smart Button to place and end calls, enter menus, toggle features on and off, and select items in the display. The Smart Button is the middle key on the left side—easy to feel, easy to find, and easy to use.

The symbol “” in your display represents the Smart Button.

Selecting Items in the Display

The most basic use of the Smart Button is for making selections. Whenever you are given a choice such as a ringer setting, press the Smart Button to select the setting you want.

Toggling Features On and Off

Some of your phone's features toggle on and off. Use the upper or lower volume key to scroll to the desired feature, then press the Smart Button to select it.

Entering the Menu System

Press , then press  to access the menu. You will see *Phone Book*.

Placing a Call

1. Enter the number you want to call.

You can also recall a previously dialed or stored number. (See “Using Memory” on page 28 for details on storing or recalling.)

2. Press and hold  to place the call. You will see *Dialing XXXXX*.

Ending a Call

1. Press and hold  until you hear a second tone. You will see  *To End Call*.
2. Press  again to end the call.

Redialing a Number

Automatic Redial

A fast busy signal indicates that the cellular system is busy. With Automatic Redial, your phone calls continuously for the next four minutes.

When it makes a connection, the phone rings or vibrates. You can distinguish this ring because it is half as long as the ring or vibrate for a new incoming call. When the person you are calling answers, you can begin talking.

If you hear a fast busy signal:

1. Press  or press . You will see `Press END to Redial.`
2. Press  to redial.

If the call does not go through after four minutes:

Press  or press  to continue the call attempt.

If you hear an ordinary busy signal:

1. Press  to hang up.
2. Press  or press  to redial the busy number.

You will see `Dialing 5551234.`

Displaying the Last Twenty Numbers Dialed

Use this feature to call any one of the last twenty numbers you've dialed.

1. Press   .

The display will show the last number dialed.

2. Press  or  to scroll through the last twenty numbers, starting with the most recent call.

3. Press and hold  or press  to call the number in your display. You will see *Dialing 5551234*.

Controlling Volume

Adjusting Volume

Use the upper and lower volume keys to adjust earpiece, keypad, and ringer volume. When you press these keys, the phone's speaker demonstrates the current volume level.

To adjust earpiece and keypad volume during a phone call:

Press  to raise or lower the volume.

To adjust the ringer volume while not in a phone call

Press  to raise or lower the volume.

Muting the Microphone

For privacy during a call, mute the microphone. You can hear the person on the other end, but he or she cannot hear you.

1. Press   to mute the microphone. You will see *Mute*.
2. Press   again to resume normal conversation.

Selecting Silent Vibration Mode

In situations where you don't want your phone to ring, or in noisy places where you may not hear your phone, select the VibraCall™ Alert function for discrete vibration:

Press   to toggle between ringer and vibration mode. You will see *Vibrate Only* or *Ring only*.

Refer to "Using Call Alert Tones" on page 63 for more details.

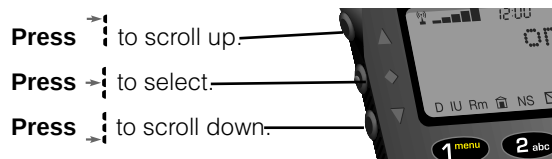
Using Memory

Use your Digital StarTAC™ phone's internal Phone Book to store up to 99 names and numbers for easy access.

In this chapter you will learn how to:

- store names and numbers into the Phone Book
- recall phone numbers from memory
- clear names and numbers
- dial a number with the Super Speed Dial and Turbo Dial™
- make notes on the scratchpad

Follow these symbols as a guide for using the keys on the side of your phone:



If you are already familiar with previous Motorola cellular phones, you can use your phone's and keys to scroll through the menu system.

Using Your Phone's Built-in Phone Book

Each phone number in your phone book is stored in a *memory location* numbered 01-99.

Arrange numbers for easy recall by storing related numbers in groups. If you store the numbers you call most in locations 01-09, then you can use Turbo Dial™ to call those numbers with a single key. (See “Using Turbo Dial™” on page 37 for details.)

You can also store names to identify phone numbers. Later, you can recall a number by the name that corresponds to it.

“Phone Book” on page 42 tells how you to use the Phone Book menu to enter and retrieve numbers, place calling card calls, and access other automated calling systems with the touch of a button.

Storing Names and Numbers

How to Store Phone Numbers

1. Enter the phone number you want to store.
2. Press **Sto** to begin storing.

The phone prompts you to enter a memory location. You will see **Location** —.

3. Enter the two-digit memory location where you want the sequence stored.

or

Press **◀*** to store the sequence in the first available location.

or

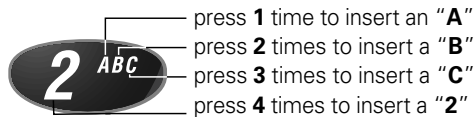
Enter the first digit of the memory location, then press **◀*** to store the sequence in the first available location beginning with that digit.

4. Enter a name to identify the phone number.
(See the following section for details on entering names.) You will see Alpha Or .
5. Press  or  when you finish entering the name.

Your phone confirms your entry by displaying the information you stored.

How to Enter Letters and Numbers

When the display shows Alpha Or , you can press the numeric keys one or more times to produce any letter or number in the alphabet. Use the letters printed on each key as a guide. For example, press  to enter "A," "B," "C," or "2" as shown:



How to Enter a Name

1. Enter a letter by pressing a key as many times as necessary. Enter punctuation by pressing  as many times as indicated by the chart below. <REFINE PUNCTUATION>

2	3	4	5	6	7	8	9	10
1	/	£	,	?	\$	.	&	!

The cursor will advance automatically to the next space after you enter a letter. If you are repeating a character, then press  to advance the cursor to the next space.

2. Press  or  to erase a letter if you make an error.
3. Press  or  when you finish entering the name.

Your phone confirms your entry by displaying the information you stored.

Tip: The  "symbol in your display represents the Smart Button.

Tip: Press the upper or lower volume key first, to toggle between upper and lower case letters.

Recalling an Entry by Name

After storing names and numbers, you can recall them alphabetically and immediately place calls. Use the Smart Button for instant access to the name directory.

1. Press  once to enter your name directory.
2. Press  or  to scroll to the name you are looking for.

or

Enter the first letter of the name you want to recall. The display shows the first name in the phone book that begins with that letter. If no entry beginning with that letter is found, No Names is displayed.

3. Press  two times if you want to see the number stored with the name.
4. Press and hold , or press , to call the number you selected.

Recalling an Entry by Memory Location

Each name and number you store is placed in a memory location numbered 01-99. Once you have stored names and numbers, you can recall them by memory location:

1. Press .
2. Enter the two-digit memory location of the phone number you want.
3. Press and hold , or press , to call the number you selected.

Clearing a Memory Entry

Clearing an Entry by Name

1. Recall by name the entry that you want to erase. (See “Recalling an Entry by Name” on page 36.)

2. Press **Clr** to clear the entry.

You will see **Clear?**.

3. Press **Sto** to confirm that you want to erase the entry.

The numbered location of the cleared entry is shown in the display.

Clearing an Entry by Location Number

1. Press **Clr** to clear the entry.

2. Press **Sto** and the location you want to clear.

You will see **XX Full Change?**

3. Press **Sto** to confirm that you want to erase the entry.

Shortcuts for Recalling Phone Book Entries

Using Super Speed Dial

If you know the memory location of the number you want to call, try the Speed Dial function:

1. Enter the two-digit memory location (01-99).
2. Press and hold **→|**, or press **Send** to place the call.

Using Turbo Dial™

The Turbo Dial™ function enables you to dial numbers stored in locations 01-09 with the push of a single button:

Press and hold a number **1** through **9** on the keypad, and your call is placed. You will hear a two-tone alert afterwards.

Your phone's Priority Call feature gives you fast access to any number stored in location 01. To learn how to activate this feature, see "Activating Priority Calling" on page 71.

Making Notes on the Scratchpad

In addition to your internal phone book, you also have a built-in scratchpad for making quick notes. The scratchpad remembers the last phone number shown on your display.

Entering a Number in the Scratchpad

If you are on the phone and your party gives you another number to call, enter the number on the scratchpad so you can place the call later.

1. Enter the number into the keypad. (The person on the line can hear tones as you dial.)
2. Press **End** to end the current call, if necessary.
3. Press **Send** to call the number you saved on the Scratchpad.

Storing Numbers During a Call

You can also store numbers during a call:

1. Enter the number into the keypad. (The person on the line can hear tones as you dial.)
2. Press **Sto** and continue storing with step 3 in "Storing Names and Numbers" on page 34.

Using the Menu System

The Digital StarTAC™ cellular phone includes many features to help you be more productive. The phone's user-friendly menu system helps you find what you need quickly and easily.

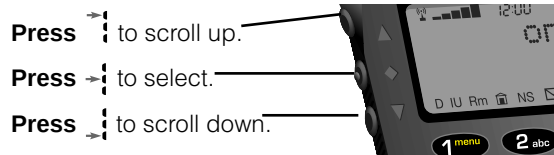
In this chapter you will learn:

- how to navigate through the menus
- how to read a roadmap

Navigating the Menu

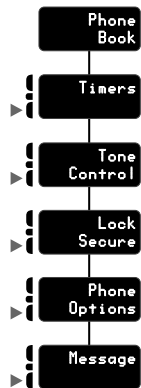
You can navigate through the menu system using the three keys located on the left side of the phone. Use the upper and lower volume keys to scroll to sub-menus and to control volume. Use the middle Smart Button to choose menus and functions.

Follow these symbols as a guide for using the keys on the side of your phone:



Tip: You can also access the menu by pressing **For 1**. "menu" is printed on the **1** key as a reminder.

If you are already familiar with previous Motorola cellular phones, you can use your phone's **<*** and **#>** keys to scroll through the menu system.



Road Maps

To help you navigate through the phone's menu system, each chapter begins with an easy-to-follow visual "road map." Simply press the key shown, and observe the message that appears in the display. For example, try this:

1. Press **Fcn**, then press **→|←** to enter the menu features.
2. Press **→|←** or **↔** to scroll through the menu's top level, shown here in the margin.
3. Press **End** to exit the menu.

Detailed instructions within each chapter describe how each feature works.

<DELETE MESSAGE BOX FROM GRAPHIC FOR ZEPPO>

<ADD SECTION ON SOFT ICONS FOR MENU LIST. SEE CDMA MANUAL, PG 56>

Managing the Phone Book

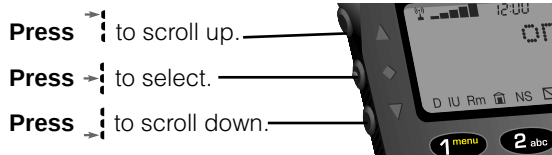
This chapter tells you how to access features using your phone's convenient menu system. You will also learn about advanced storing features that help you use calling cards and access automated calling systems.

ADD SOFT
ICON

In this chapter you will learn how to:

- recall and store phone numbers using the menu system
- store numbers with pause dialing
- store calling card sequences for easy access
- edit your memory information
- view your own phone number
- adjust the information on the display

Follow these symbols as a guide for using the keys on the side of your phone:



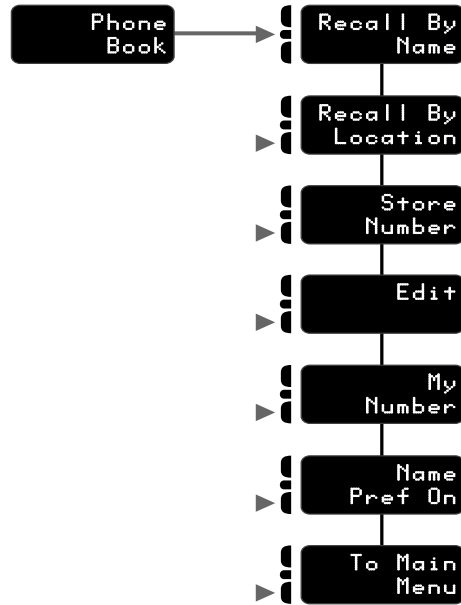
If you are already familiar with previous Motorola cellular phones, you can use your phone's **<*>** and **#>** keys to scroll through the menu system.

<DELETE TIME FROM GRAPHIC>

Road Map for Phone Book

Press **Fcn**, then press **→** to enter the menu system.

Start:



Getting to Phone Book...

1. Press **Func**, then press **→** to enter the menu system.
2. Press **→** or **←** to scroll to **Phone Book** and press **→** to select.
3. Press **→** or **←** to scroll to the following features, and press **→** to select.

Recalling an Entry by Name

To recall a stored name with the Phone Book menu:

1. Follow the steps in the "Getting to Phone Book..." block above to select **Recall By Name**. You will see **Enter 1st Letter**.
2. Enter the first letter of the name you want to recall. The display shows the first name in the phone book that begins with that letter. If no entry beginning with that letter is found, **No** is displayed.
3. Press **→** or **←** to scroll to the name you want.
4. Press **Rcl** two times if you want to see the number stored with the name.
5. Press and hold **→**, or press **Send** to call the number you selected.

Tip: You can also recall phone numbers without using the Phone Book. See "Recalling an Entry by Name" on page 36 or "Recalling an Entry by Memory Location" on page 36.

Recalling an Entry by Location

Each name and number you store is placed in a memory location numbered 01-99. After storing names and numbers, you can recall them by memory location with the Phone Book menu.

1. Follow the steps in the "Getting to Phone Book..." block above to select **Recall By Location**. You will see **Location**.
2. Enter the two-digit memory location of the number you want.

3. Press and hold , or press , to call the number you selected.

Storing with the Menu

Use the phone's menu system to store names and numbers into the Phone Book.

1. Follow the steps in the "Getting to Phone Book..." block to select **Store Number**. You will see **Enter Number**.
2. Enter the phone number you want to store. See "How to Enter Letters and Numbers" on page 35.
3. Press  when you finish entering the number.

You will see **Location** —.

4. Press  to store the sequence in the next available location.

or

Enter the first digit of the memory location and press  to store the sequence in the first available location beginning with that digit.

or

Enter the two-digit memory location where you want the sequence stored.

5. Enter a name to identify the phone number, or skip this step and continue with step 6. (See "How to Enter a Name" on page 35 for details on entering names.)
6. Press , or press , when you finish entering the name. Your phone confirms your entry by displaying the location, number, and name you stored. Proceed with step 7 below, or return to step 2 above to store more numbers.
7. Press  to exit the menu.

Tip:
You will see Alpha Or . If the chosen location is full, press  and restart the storing sequence.

Getting to Phone Book...

1. Press **Fcn**, then press **→|** to enter the menu system.
2. Press **→|** or **←|** to scroll to **Phone Book** and press **→|** to select.
3. Press **→|** or **←|** to scroll to the following features, and press **→|** to select.

Storing and Placing Numbers With Pause Dialing

Entering a Pause in a Number

When you call automated systems, a recorded message prompts you for PIN numbers, Voice Mail numbers, etc.

You can store these numbers in your phone's memory, separated by "pauses"—special characters that tell your phone to wait before sending additional numbers.

1. Follow the steps in the "Getting to Phone Book..." block above to select **Store Number**. You will see **Enter Number**.
2. Enter the phone number you use to access the automated system.
3. Press **Fcn**, then press **Send**.
You will see **Insert Pause**.
4. Press **→|** to insert a pause (○) into the sequence.
5. Enter the next group of numbers (such as an account number or PIN number.)
6. Enter any other required symbols (such as * or #).

7. Insert another pause, and enter the next group of numbers by repeating steps 3 through 5 as many times as necessary.

You can store up to 32 digits, including pauses. Then store the entire sequence as you would any phone number.

8. Press **Sto** to begin storing.

You will see **Location** —.

9. Enter the two-digit memory location where you want the sequence stored.

You will see **Alpha Or** #.

10. Enter a name for your sequence.

(See “How to Enter a Name” on page 35 for details on entering names.)

11. Press **→|** when you finish entering the name.

Your phone confirms your entry by displaying the location, number, and name you stored.

Placing a Call with Pauses

To use your stored sequence:

1. Recall the stored number with the pause inserted.
2. Press and hold **→|**, or press **Send**, to place the call.
3. When the recording prompts you for information, press **→|** or **Send** to send the next set of stored numbers.
4. Press **→|** or press **Send** as many times as necessary, to transmit all the numbers.

Getting to Phone Book...

1. Press **Func**, then press **→|** to enter the menu system.
2. Press **→|** or **←|** to scroll to **Phone Book** and press **→|** to select.
3. Press **→|** or **←|** to scroll to the following features, and press **→|** to select

Storing and Placing Numbers for Calling Card Information

Storing Calling Card Information

Like Pause Dialing, you can store calling card access numbers, separated by pauses, for recall later. You can also store a Number Character in the sequence to save a place for the number you call when you use your calling card.

See "Using Lock/Security Features" on page 67 for more information on protecting your calling card information.

1. Follow the steps in the "Getting to Phone Book..." block above to select **Store Number**. You will see **Enter Number**.
2. Enter the phone number you use to access your calling card system. (Skip this step if you only dial 0.)
3. Press **Func** **Send**. You will see **Insert Pause 0**.
4. Press **→|** to insert a pause (0) into the sequence.
5. Enter the next numbers, if needed. (For example, some long distance carriers require you to dial a 0 first. If no further numbers are needed, skip to step 7.)
6. Press **Func** **Send**.

7. Press  to scroll to the Number Character. You will see *Insert Number* .
8. Press  to insert the  Character.
This special character saves a place for the phone number you will be calling. The number is inserted automatically when you place the call.
9. Press  .
10. Press  to insert another pause, as in steps 3 and 4.
11. Enter your calling card PIN number.
12. Press  to store your calling card sequence.
You will see *Location* .
13. Enter the two-digit memory location where you want the sequence stored.
You will see *Alpha Or* .
14. Enter a name for your sequence. (See “How to Enter a Name” on page 35 for details on entering names.)
15. Press  when you are finished entering the name.
Your phone confirms your entry by displaying the location, number, and name you stored.

Placing a Calling Card Call

To recall your stored calling card information:

1. Recall the calling card information you stored.
(See “Recalling an Entry by Name” and “Recalling an Entry by Location” on page 43 for more information on Recalling Numbers.)
2. Press  before entering the number. You will see *Enter Number*.

3. Enter the phone number you want to call, including the area code.

Enter the number manually, by location, or recall.
4. Press and hold , or press , to place the call.

Your phone dials the number to access your long distance provider.
5. Press , or press , to send the next group of numbers when you are prompted.

The phone automatically inserts the selected number to call at the appropriate time in the sequence.
6. Repeat step 5 to send the next group of numbers as many times as necessary.

Getting to Phone Book...

1. Press **Fon**, then press **→|** to enter the menu system.
2. Press **→|** to scroll to **Phone Book** and press **→|** to select.
3. Press **→|** to scroll to the following features, and press **→|** to select.

Editing a Memory Location

After you store names and numbers in the Phone Book, you can edit the information or erase entries at any time.

1. Follow the steps in the "Getting to Phone Book..." block above to select **Edit**.
2. Recall the entry by location or by name.
(See "Recalling an Entry by Name" and "Recalling an Entry by Location" on page 43.)
3. Press **→|** to begin editing the phone number.
The display shows the name briefly, then the phone number.
4. Press **Clr** to erase one digit at a time.
Press and hold **Clr** to erase the entire number.
5. Enter your changes to the phone number.
6. Press **→|** when you finish editing the phone number.
The display shows the location where your number is currently stored.
7. Press **Clr** to erase the memory location, then enter a new two-digit location.

or

Press  to keep the phone number in its current location.

The display shows the name stored with the phone number you are editing.

8. Enter your changes to the name. (See “How to Enter a Name” on page 35.)

Press  to erase one letter at a time, or skip to step 9 to leave the name unchanged.

9. Press  when you finish editing the name. The display shows the new information.

10. Press  to save your changes.

Your phone confirms your entry by displaying the location, number, and name you stored.

or

Press  to leave the information unchanged.

When you see **Location** , enter a new two-digit memory location to avoid overwriting the information in the current location.

11. Press  to exit, or scroll to other features.

Getting to Phone Book...

1. Press **Fcn**, then press **→|** to enter the menu system.
2. Press **→|** or **→|** to scroll to **Phone Book** and press **→|** to select.
3. Press **→|** or **→|** to scroll to the following features, and press **→|** to select.

Viewing Your Own Number

Use this feature to view your phone's currently active phone number. If you have more than one phone number, you can change the active number with the Change Number feature in the Phone Options menu. (See "Switching Between Numbers" on page 82.)

Shortcut:

Press **Rcl** **#** **▶** for a quick look at your phone number.

1. Follow the steps in the "Getting to Phone Book..." block above to select **My Number**.

2. Press **→|** to view your own phone number.

Your active phone number appears on the screen. After six seconds, the phone returns to step 1.

3. Press **End** to exit, or scroll to other features.

Phone Book Display Preferences

The Name Preference feature determines the order in which the Phone Book displays information. When you recall information by location and this feature is:

Off—You see the stored phone number first and must press **Rcl** to see the associated name.

On—You see the stored name first and must press **Rcl** **Rcl** to see the associated phone number.

To turn this feature on or off:

1. Follow the steps in the "Getting to Phone Book..." block to select the Name Preference feature.

You will see Name Pref On or Name Pref Off.

2. Press **→|** to toggle between Name Pref On and Name Pref Off.
3. Press **End** to exit, or scroll to other features.

You should set Name Preference to Name Pref On if you subscribe to Caller ID, so that you can see the name of the person who is calling. See "Using Caller ID" on page 97.

Shortcut:

Press **Fon**, the Smart Button, **1** **2** and continue with step 2.

Timing Your Calls

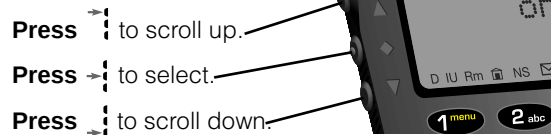
ADD SOFT ICON

Your phone's Call Timers give you a variety of options for managing your time. You can monitor the length of individual calls, set a timer to track monthly usage, or have the phone alert you at intervals that you specify.

In this chapter you will learn how to:

- view the timers
- monitor the length of your calls
- set and view the resettable timer for long-term monitoring
- program audible timers for your individual needs

Follow these symbols as a guide for using the keys on the side of your phone:

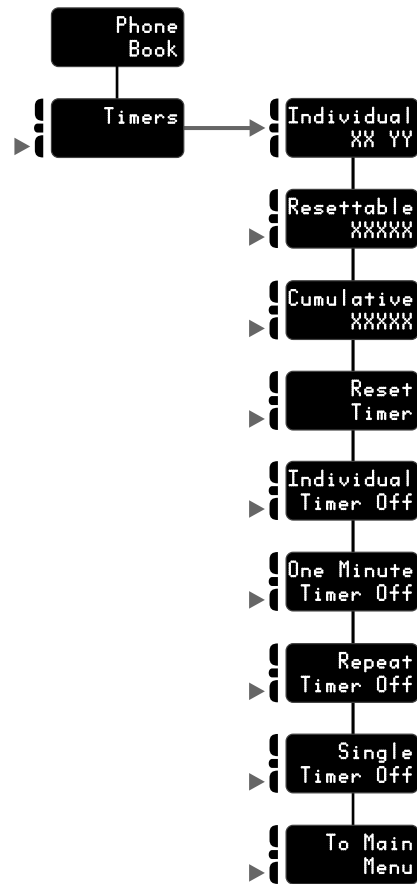


If you are already familiar with previous Motorola cellular phones, you can use your phone's **<*** and **#>** keys to scroll through the menu system.

Road Map for Call Timers

Press **Fch**, then press **→**, to enter the menu system.

Start:



Getting to Call Timers...

1. Press **Fcn**, then press **→** to enter the menu system.
2. Press **→** or **←** to scroll to **Timers** and press **→** to select.
3. Press **→** or **←** to scroll to the following features, and press **→** to select.

Shortcut 1:

Press **Rcl** **#** twice for a quick look at this timer.

Shortcut 2:

Press **Fcn**, the Smart Button, **4** **5** for a quick look at this timer.

Shortcut 1:

Press **Rcl** **#** three times for a quick look at this timer.

Viewing the Individual Call Timer

You can view the air-time of the most recent call or the call in progress (in minutes and seconds) at any time using this feature. The Individual Call Timer resets when you place the next call and when you turn the phone off. You can also choose to have the timer display while calls are in progress. See “Displaying the Individual Timer Automatically” on page 58.

1. Follow the steps in the “Getting to Call Timers...” block above to select **Individual XX YY**. The display will show the air-time of your last call in minutes (XX) and seconds (YY).
2. Press **End** to exit, or scroll to other features.

Viewing the Resettable Call Timer

You can track how much air time you have accumulated at any time. Use this feature to view the time elapsed, and follow the instructions in “Resetting the Timer” on page 57 to reset the timer.

1. Follow the steps in the "Getting to Call Timers..." block above to select `Resettable XXXXX`. The display shows your air time in minutes since you last reset the timer.
2. Press `End` to exit, or scroll to other features.

Viewing the Cumulative Timer

This is a non-resettable timer that keeps track of your phone's total air time (in minutes).

1. Follow the steps in the "Getting to Call Timers..." block to select `Cumulative XXXXX`. The display will show your air time in minutes since your phone was activated.
2. Press `End` to exit, or scroll to other features.

Resetting the Timer

By resetting this timer at the beginning of each billing cycle, you can keep a running tab of your monthly usage. After you reset the timer, it continues to keep track of your air time (in minutes) until you reset it again.

1. Follow the steps in the "Getting to Call Timers..." block to select `Individual XX YY`.
2. Press `→` to scroll to `Reset Timer`.
3. Press `→` to reset the timer.
4. Press `End` to exit, or scroll to other features.

Note: The shortcuts do not work if the Reset Timer is already set at zero.

Shortcut 2:

Press `Fcn 4 6` for a quick look at this timer.

Shortcut 1:

Press `Rcl #▶` four times for a quick look at this timer.

Shortcut 2:

Press `Fcn`, the Smart Button, `4 7` for a quick look at this timer.

Shortcut 1:

Press `Fcn`, the Smart Button, `4 3` and continue with step 3.

Shortcut 2:

Press `Fcn 0 7 Clr` to reset the timer. You will see `Reset Timer`.

Getting to Call Timers...

1. Press **Fcn**, then press **→|** to enter the menu system.
2. Press **→|** to scroll to **Timers** and press **→|** to select.
3. Press **→|** to scroll to the following features, and press **→|** to select.

Shortcut:

Press **Fcn**, the Smart Button, **4** **8** and continue with step 2.

Tip:

Activating the Individual Timer may reduce both standby and talk times.

Shortcut:

Press **Fcn**, the Smart Button, **4** **4** and continue with step 2.

Displaying the Individual Timer Automatically

When you turn this feature on, your phone automatically displays your air time in minutes (XX) and seconds (YY) during and after each call.

1. Follow the steps in the "Getting to Call Timers..." block to select **Individual Timer**. You will see **Individual Timer Off** or **Individual Timer On**.
2. Press **→|** to toggle between **Individual Timer Off** and **Individual Timer On**.
3. Press **End** to exit, or scroll to other features.

Setting the One-Minute Audible Timer

Activate this feature to hear an audible beep 10 seconds before the end of every minute during a call. The party on the other end will not hear the beeps.

1. Follow the steps in the "Getting to Call Timers..." block to select **One Minute Timer**. You will see **One Minute Timer Off** or **One Minute Timer On**.
2. Press **→|** to toggle between **One Minute Timer Off** and **One Minute Timer On**.
3. Press **End** to exit, or scroll to other features.

Setting the Repeating Audible Timer

You can set this timer to beep during your calls at an interval that you select—from 11-999 seconds. You will hear the beep 10 seconds before the end of each interval, but the party on the other end will not hear the beeps.

1. Follow the steps in the "Getting to Call Timers..." block to select Repeat Timer. You will see Repeat Timer Off or Repeat Timer On.
2. Press  to toggle between Repeat Timer Off and Repeat Timer On.

The prompt to enter seconds appears **only** if you have turned the feature on. If you have turned it off, you will see Repeat Timer Off.

3. Enter the number of seconds you would like between audible beeps. You will see Beep At YYY Secs.
4. Press  to set the timer. The phone confirms the setting by displaying Set At YYY Secs.
5. Press  to exit, or scroll to other features.

Shortcut:

Press , the Smart Button,   and continue with step 2.

Setting the Single Timer

Like the Repeating Timer, you can set the Single Timer to beep at a time that you select—from 11-999 seconds. It will beep once during each call, 10 seconds before the end of the interval. The party on the other end will not hear the beeps.

1. Follow the steps in the "Getting to Call Timers..." block to select Single Timer. You will see Single Timer Off or Single Timer On.

Shortcut:

Press , the Smart Button,   and continue with step 2.

2. Press  to toggle between Single Timer Off and Single Timer On.

The prompt to enter seconds appears **only** if you have turned the feature on. If you have turned it on, you will see Single Timer Off.

3. Enter the number of seconds you would like between audible beeps. You will see Beep At 'YYY' Secs.
4. Press  to set the timer. The phone confirms the setting by displaying Set At 'YYY' Secs.
5. Press  to exit, or scroll to other features.

Adjusting Tone Controls

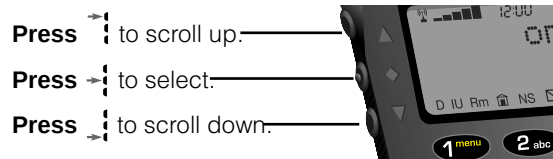
Use these features to select vibration mode, personalize your phone's ringer styles, or turn the ringer off.

ADD SOFT
ICON

In this chapter you will learn how to:

- activate and deactivate the VibraCall™ Alert function
- choose from nine different ringer styles
- silence the keypad
- silence the scratchpad
- select the distinctive ringer feature

Follow these symbols as a guide for using the keys on the side of your phone:

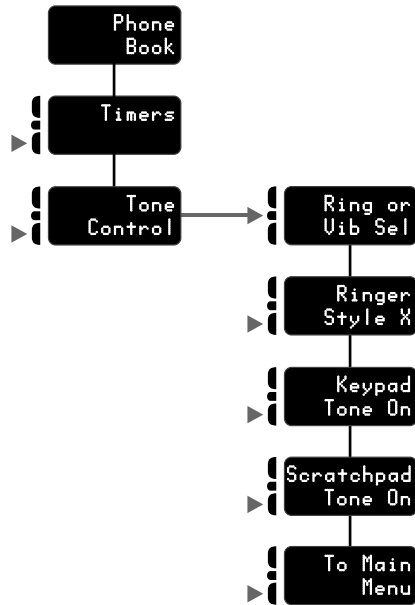


If you are already familiar with previous Motorola cellular phones, you can use your phone's **<*** and **#>** keys to scroll through the menu system.

Road Map for Tone Controls

Press **Fch**, then press **→** to enter the menu system.

Start:



REPLACE WITH NEW MENU:

Call Alert
Tone

Msg Alert
Tone

Distinct
Ring Tone

Ringer
Style X

WHAT'S THE DIFFERENCE BETWEEN THE LAST
TWO ITEMS?

Getting to Tone Controls...

1. Press **Fcn**, then press **→|** to enter the menu system.
2. Press **→|** to scroll to **Tone Control** and press **→|** to select.
3. Press **→|** to scroll to the following features, and press **→|** to select.

Using Call Alert Tones

Using this feature, you can choose to be alerted to incoming calls using the vibrating ringer, the ringer, both, or neither.

In particular, the VibraCall™ Alert vibrating ringer is ideal for situations where ringing may not be appropriate, or in noisy places where you might not hear the ringer.

1. Follow the steps in the "Getting to Tone Controls..." block above to select **Call Alert Tones**. The display shows your current ringer setting.
2. Press **→|** to scroll through your choices: Ring, Vibrate, Ringer and Vib, and Silent.

When both the ringer and vibrator are on, the phone alerts you by vibrating for three ring cycles and then ringing.

3. Press **→|** when you reach the setting you want.
4. Press **End** to exit, or scroll to other features.

<DESCRIBE SOFT ICONS FOR TONE MODE.
REFER TO "READING THE INDICATORS.">

Shortcut 1:

Press **Fcn** **8** to toggle the VibraCall™ Alert function on and off.

Shortcut 2:

Press **Fcn**, the Smart Button, **3** **0**, and continue with step 2.

Shortcut 3:

Press **Fcn**, the Smart Button, **3** **1**, and continue with step 2.

Selecting a Ringer Style

Your phone lets you select any of nine different ringer styles. After you choose a style, the phone give you a brief sample of the new ringer style, or vibrates if you have selected the VibraCall™ Alert feature.

<ACCORDING TO THE NEW MENU STRUCTURE, SHOULDN'T THIS BE "RINGER STYLE X" AND NOT BE UNDER CALL ALERT TONES?>

1. Follow the steps in the "Getting to Tone Controls..." block to select **Call Alert Tones**. Then select **Ringer Style**. You will hear a sample of your current ringer style, and you will see **Select 1-9**.
2. Press **1** through **9** to hear the different ringer styles, or scroll through the ringer styles.
3. Press **→|** when you reach the ringer style you want.
4. Press **End** to exit, or scroll to other features.

Using Message Alert Tones

Using this feature, you can choose to be alert to incoming voice mails and short messages using the vibrating ringer, beeping, or neither.

1. Follow the steps in the "Getting to Tone Controls..." block to select **Message Alert Tones**. The display shows your current beeping setting.
2. Press **→|** to scroll through your choices: **Beep**, **Vibrate**, and **Silent**.
3. Press **→|** when you reach the setting you want.
4. Press **End** to exit, or scroll to other features.

Getting to Tone Controls...

1. Press **Func**, then press **→** to enter the menu system.
2. Press **→** to scroll to **Tone Control** and press **→** to select.
3. Press **→** to scroll to the following features, and press **→** to select

Turning Keypad Tones On and Off

Keypad tones are the sounds you hear when you press any key on the phone. If you want to be discreet, use this feature to silence the audio feedback from the keypad.

<DOES THIS STILL EXIST? WHAT IS THE MENU OPTION?>

Note: The other party will still hear tones.

1. Follow the steps in the "Getting to Tone Controls..." block to select Keypad Tone. You will see Keypad Tone On or Keypad Tone Off.
2. Press **→** to toggle between Keypad Tone On and Keypad Tone Off.
3. Press **End** to exit, or scroll to other features.

Turning Scratchpad Tones On and Off

Scratchpad tones are the tones that your phone sends to access automated calling systems like Voice Mail. If you don't want your party to hear these sounds when you use the scratchpad, turn the scratchpad tones off.

<DOES THIS STILL EXIST? WHAT IS THE MENU OPTION?>

Shortcut:

Press **Func**, then the Smart Button, **3**, **2**, and continue with step 2.

Shortcut:

Press **Fcn**, the Smart Button, **3** **3**, and continue with step 2.

1. Follow the steps in the "Getting to Tone Controls..." block to select Scratchpad Tone. You will see Scratchpad Tone On or Scratchpad Tone Off.
2. Press **→|** to toggle between Scratchpad Tone On and Scratchpad Tone Off.
3. Press **End** to exit, or scroll to other features.

Note: If you turned the scratchpad tones off but want to access a tone-activated system like Voice Mail, place the call, enter the numbers you need to transmit, then:

Press **Rcl** **Send** to send the tones.

Using Lock/Security Features

While you probably would not want to leave your phone unattended, the Digital StarTAC™ has a number of built-in security features to prevent unauthorized use.

NEW SOFT
ICON

In this chapter you will learn how to:

- activate the Voice Privacy feature
- lock and unlock your phone
- place priority calls
- change your lock code
- restrict call placement and memory access
- reset or clear your phone's settings
- activate your phone's Authentication feature

Follow these symbols as a guide for using the keys on the side of your phone:

Press  to scroll up.

Press  to select.

Press  to scroll down.

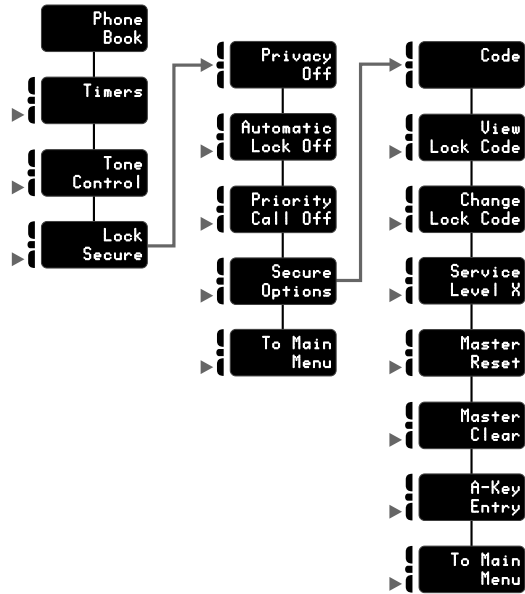


If you are already familiar with previous Motorola cellular phones, you can use your phone's  and  keys to scroll through the menu system.

Road Map for Lock Security

Press **Fch** then press, **→** to enter the menu system.

Start:



Getting to Lock Security...

1. Press **Fcn**, then press  to enter the menu system.
2. Press  to scroll to **Tone Control** and press  to select.
3. Press  to scroll to the following features, and press  to select.

Activating Voice Privacy

When you activate your phone's Voice Privacy feature, you request your cellular system to search for a Voice Privacy channel with each call. If no Voice Privacy channel is available (or your call is "handed off" to a cell where a Voice Privacy channel is not available), five short beeps alert you that the call is no longer private.

You must select the Voice Privacy feature before you make a call in order for that call to search for a Voice Privacy channel.

Note: This feature is not available in all markets. Contact your Service Provider for additional information about your service area.

To turn the Voice Privacy feature on or off:

1. Follow the steps in the "Getting to Lock/Security..." block above to select **Voice Privacy**. You will see **Privacy Off** or **Privacy Preferred**.
2. Press  to toggle between **Privacy Off** and **Privacy Preferred**.
3. Press **End** to exit, or scroll to other features.

Shortcut:

Press **Fcn**, the Smart Button, **1** **5**, and continue with step 2.

Tip: "LOCK" is printed on the **5** key, as a reminder.

Locking/Unlocking Your Phone

Locking Your Phone Automatically

When you turn this feature on, your phone automatically locks itself each time you turn it off.

1. Follow the steps in the "Getting to Lock/Security..." block to select Automatic Lock. You will see Automatic Lock Off or Automatic Lock On.
2. Press **→|** to toggle between Automatic Lock Off and Automatic Lock On.
3. Press **End** to exit, or scroll to other features.

Locking Your Phone Manually

You can lock your phone manually at any time to prevent unwanted use. Once you lock the phone, it remains locked whether it is powered on or off.

1. Press **Fcn**.
2. Press and hold **5** for at least one full second. You will see Lock?.
3. Press **Sto** or **→|** to lock. You will see Locked.

Unlocking Your Phone

To unlock your phone:

Once your phone is on, **enter your three-digit lock code** to unlock your phone. (See "Viewing the Lock Code" on page 72 and "Changing the Lock Code" on page 72 for more information on your lock code.)

Answering Calls While the Phone Is Locked

You can still receive calls when the phone is locked. To answer an incoming call:

1. Enter your three-digit lock code.
2. Press  or press  to receive the call.

Activating Priority Calling

Priority Call allows the Turbo Dial™ function to dial from memory location 01—even when the phone is locked. You can store an emergency number or the number of someone you would like to contact in case of emergency.

Note: Some cellular systems have their own emergency numbers and deny access to emergency numbers like 911 (not available in some areas). Check with your Service Provider for more information.

By default, Priority Call is activated. To turn it off or to switch it back on, complete the following steps:

1. Follow the steps in the "Getting to Lock/Security..." block on the previous page to select Priority Call. You will see Priority Call Off or Priority Call On.
2. Press  to toggle between Priority Call Off and Priority Call On.
3. Press  to exit, or scroll to other features.

Tip: If you forget your lock code, try pressing    or the last three digits of your cellular phone number.

Shortcut:

Press , the Smart Button,  , and continue with step 2.

Getting to Security Options...

1. Press **Fcn**, then press **→|** to enter the menu system.
2. Press **→|** or **↵** to scroll to **Lock Secure** and press **→|** to select.
3. Press **→|** or **↵** to scroll to the **Secure Options** submenu, and press **→|** to select.
4. Enter your **six-digit security code**, scroll to the following features, and press **→|** to select.

Shortcut:

Press **Fcn**, the Smart Button, **5** **5**, and continue with step 2.

Managing Security Options

For your protection, you must enter the six-digit security code to access the features that your phone contains. The factory-programmed lock code for unlocking the phone is 123. The six-digit security code is 000000. These may have been changed when your phone was activated.

Viewing the Lock Code

To display the active three-digit lock code:

1. Follow the steps in the "Getting to Security Options..." block above to select **View Lock Code**.
2. Press **→|** to display your three-digit lock code. The code appears for a few seconds.
3. Press **End** to exit, or scroll to other features.

Changing the Lock Code

To change your three-digit lock code:

1. Follow the steps in the "Getting to Security Options..." block above to select **Change Lock Code**. You will see **Enter Code —**.
2. Enter the new three-digit code. You will see **Changed To XXX**.
3. Press **End** to exit, or scroll to other features.

Note: If you try to change your lock code to 911 or the first three digits of an emergency number, you will see *Code Invalid*, and the code you entered **will not** be accepted. You will return to step 1 above.

Restricting Call Placement

You may want to restrict call placement or hide memory information when loaning your phone to others.

Selecting a Service Level

1. Follow the steps in the "Getting to Security Options..." block to select *Service Level*. The phone displays your current service level. Refer to the chart on the next page.
2. Press  to scroll through the service level settings, and press  to select the service level you want.

If you select Level 7, the phone prompts you for the range of memory locations you want to remain active. You will see *Range 1---*.

Enter the range of digits memory locations from which calls will be allowed. The phone confirms the allowed range, and you will see *1-XX Allowed*.

3. Press  to exit, or scroll to other features.

Service Level Settings

Each of your phone's eight service levels offers a different combination of access privileges and restriction.

Level	Description	Display
1	• Calls can be placed from memory locations 1-10 only. • No dialing from keypad • No memory edit or storage • No access to name directory • No access to last number dialed	1 Memory 1-10
2	• Calls can be placed from all memory locations. • No dialing from keypad • No memory edit or storage • No access to Caller ID stack	2 Memory Only
3	• Calls can be placed manually from the keypad only. • No access to memory information • No memory edit or storage • No access to Caller ID stack	3 Keypad Only
4	Standard setting, no restrictions	4 Standard Setting
5	Seven-digit (local) dialing only	5 Local Only
6	• Calls can be placed from the keypad and from memory. • No edit or memory storage to memory locations 1-10 • Memory cannot be changed.	6 No Store 1-10

7	• Calls can be placed from a selected memory range only. • Memory edit and storage allowed with the selected range. • No access to name directory	7 Allow Range
8	No edit, storage, or recall from memory locations 1-10	8 Hide Turbo

Getting to Security Options...

1. Press **Fcn**, then press $\rightarrow$ to enter the menu system.
2. Press $\rightarrow$ or $\leftarrow$ to scroll to **Lock Secure** and press $\rightarrow$ to select.
3. Press $\rightarrow$ or $\leftarrow$ to scroll to the **Secure Options** submenu, and press $\rightarrow$ to select.
4. Enter your **six-digit security code**, scroll to the following features, and press $\rightarrow$ to select.

Resetting All Options

Use the Master Reset feature to reset all user-selectable options back to their original factory settings.

Note: Once you select this feature, the reset process cannot be canceled or reversed.

1. Follow the steps in the "Getting to Security Options..." block above to select **Master Reset**.
2. Press $\rightarrow$ if you want to reset all your phone's options back to their factory settings. You will see **Standard Setting**.

or

Press **End** to exit the menu if you do not want to reset your phone's options.

3. Press **End** to exit, or scroll to other features.

Clearing All Stored Information

If you want to start over, use Master Clear to reset all user-selectable options, clear the resettable timer, and erase all Phone Book information.

Note: Once you select this feature, the process cannot be canceled or reversed.

1. Follow the steps in the "Getting to Security Options..." block to select **Master Clear**.
2. Press **→|** to clear the memory and reset all your phone's options back to their factory settings. You will see **Busy**. (This takes a few seconds.)

or

Press **End** to exit the menu if you do not want to reset your phone's options.

3. Press **End** to exit, or scroll to other features.

Authenticating Users

Your Digital StarTAC™ is equipped with an authentication feature called the A-Key, which acts like a PIN number and helps prevent unauthorized use of your phone. Contact your Service Provider for your personalized A-Key number.

Note: This feature should only be programmed once.

1. Follow the steps in the "Getting to Security Options..." block to select **A-Key Entry**. The display will show the phone's active phone number.

If the number displayed is not the number you want for the A-Key, press **←*** or **#→** to switch to the second programmed number. Your phone will use this number once you exit this feature.

2. Press **→|** to select.

Enter the 6- to 26-digit A-Key number as supplied by your Service Provider. Press **Clr** to correct errors.

Shortcut:

Press **Fcn**, the Smart Button, **5** **2**, and continue with step 2.

3. Press  or  to validate the A-Key entry.
 - If you input the A-Key correctly, you will see `Valid`.
 - If you input the A-key input incorrectly, you will see `Invalid`. Re-enter your A-Key.
4. Press  to exit, or scroll to other features.

Customizing Phone Features

The Phone Options menu lets you customize the way your phone sends and receives calls.

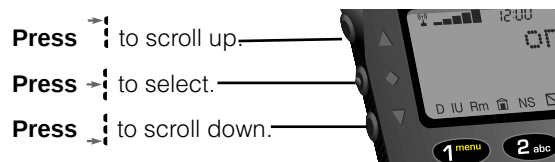
NEW SOFT
ICON

You can tune your phone for optimal performance, view information about the phone, and choose from a number of convenient features.

In this chapter you will learn how to:

- switch among dual, analog, or digital mode
- switch cellular phone numbers
- select the type of cellular system
- review your phone's feature settings
- block incoming calls
- select features for vehicular use
- conserve battery power
- view numbers with Caller ID
- display your system identification
- select a language

Follow these symbols as a guide for using the keys on the side of your phone:

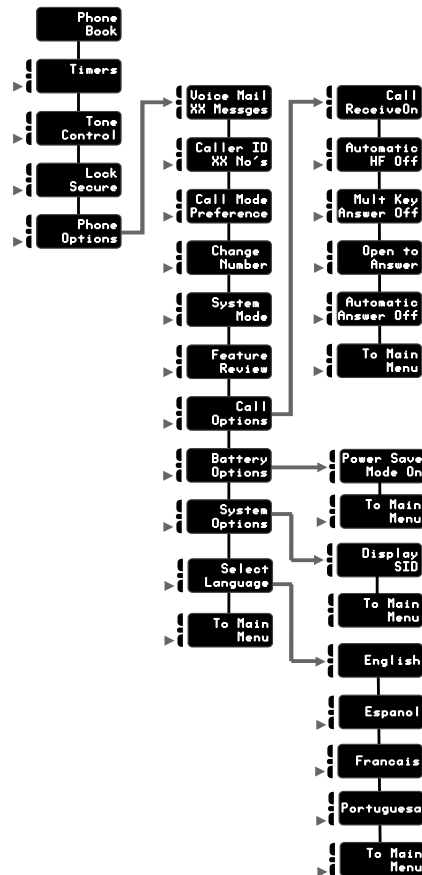


If you are already familiar with previous Motorola cellular phones, you can use your phone's **<*** and **#>** keys to scroll through the menu system.

Road Map for Phone Options

Press **Fch**, then press **→** to enter the menu system. <MODIFY. DELETE MESSAGE CENTER ITEMS, LIKE VOICE MAIL.>

Start:



Getting to Phone Options...

1. Press **Fcn**, then press $\rightarrow$ to enter the menu system.
2. Press $\rightarrow$ or $\leftarrow$ to scroll to **Phone Options** and press $\rightarrow$ to select.
3. Press $\rightarrow$ or $\leftarrow$ to scroll to the following features

Selecting Call Mode Preference

Either a digital or analog channel can be assigned to your phone, based upon system channel availability.

Examples of peripheral devices that require analog operation include fax machines, personal computers with modems, and telemetry monitors (EKG). This feature must be selected before a call originates in order for the call to be analog.

Note: When powered on, your Digital StarTAC™ cellular phone will first search for a digital channel. If no digital channel is available, your phone will switch to an analog channel.

1. Follow the steps in the "Getting to Phone Options..." block to select Call Mode Preference.
2. Press $\rightarrow$ or $\leftarrow$ to toggle among Dual, Analog, or Digital modes.
3. Press $\rightarrow$ to select a Dual, Analog, or Digital channel. You will see Dual Mode, Analog Mode, or Digital Mode.
4. Press **End** to exit, or scroll to other features.

Warning: If you select either Analog Voice Only or Digital Voice Only, you will not be able to make a call if the selected system is not available.

Tip: If this feature is selected during a call, the feature will be effective with the next call. Press **Fcn** **2** to switch between digital and analog mode.

Switching Between Numbers

Your phone can operate on two different home systems. If you travel often, you can have your phone programmed with two cellular numbers to reduce roaming. This feature allows you to change your active number to the one appropriate for the area you're in.

When your phone has two numbers, both are designated as your home system but only one number can be active at any given time. Calls are placed and received by the currently active number only. Each time you turn your phone ON, you'll see a message in the display that indicates which phone number and home system are currently active:

Non-wireline type with phone number 1	A1
Non-wireline type with phone number 2	A2
Wireline with phone number 1	B1
Wireline with phone number 2	B2

In most areas, there are two competing cellular carriers, the *wireline* carrier and the *non-wireline* carrier. Your display indicates which type of carrier your home system is as follows:

non-wireline carrier—The display indicates that your home system is system A.

wireline carrier—The display indicates that your home system is system B.

To switch your phone number:

1. Follow the steps in the "Getting to Phone Options..." block to select *Change Number*. The active phone number will appear in the display (for example, 5155551515).
2. Press  to switch to your other phone number (for example, 7085551212).
3. Press  to confirm the new setting.
4. Press  to exit, or scroll to other features.

Getting to Phone Options...

1. Press **Fn**, then press **→** to enter the menu system.
2. Press **→** to scroll to **Phone Options** and press **→** to select.
3. Press **→** to scroll to the following features

Selecting a Cellular System

Your Service Provider configures the System Mode feature when you receive a cellular phone number. Use this feature to select the type of cellular system your phone will access.

1. Follow the steps in the "Getting to Phone Options..." block to select **System Mode**.
1. Press **→** to scroll through the mode settings:

Standard Mode —Your phone first seeks a home type system, then a non-home type system <i>If home is non-wireline (type A)</i> <i>If home is wireline (type B)</i>	S+d AB S+d BA
Reversed Preference Mode —Your phone first seeks a non-home type system, then a home type system. (May be useful in fringe areas or certain roaming situations) <i>If home is non-wireline (type A)</i> <i>If home is wireline (type B)</i>	Scan BA Scan AB
Home Only Mode —The phone will not operate outside its home system.	Home
Scan A Mode —The phone will operate only within nonwireline (type A) systems.	Scan A
Scan B Mode —The phone will operate only within wireline (type B) systems.	Scan B

Shortcut 1:

Press **Rcl**, **←***, and continue with step 3.

Shortcut 2:

Press **Fn**, the Smart Button, **2** **3**, and continue with step 2.

2. Press  to select the system mode setting you want.
3. Press  to exit, or scroll to other features.

Reviewing Feature Settings

Use this feature to review the changes you've made to feature settings.

Note: While scrolling through Feature Review, you can only review settings. You cannot change them.

1. Follow the steps in the "Getting to Phone Options..." block to select Feature Review. The display message indicates whether the phone is accessing a Digital, Analog, or Control Channel:

 X - xxxx D=Digital Traffic Channel
Digital Slot Number

or

 - xxxx A=Analog Voice Channel

or

 - xxxx C=Control Channel
Control Channel

Note: The  icon flashes when on a digital control channel.

2. Press  or press  or  to scroll through features you changed from their default settings.

If all of the features are set to the factory standard settings, the display will show Standard Setting.

3. Press  to exit the menu.

Getting to Call Options...

1. Press **Fcn**, then press $\rightarrow$ to enter the menu system.
2. Press $\rightarrow$ to scroll to **Phone Options** and press $\rightarrow$ to select.
3. Press $\rightarrow$ to scroll to the **Call Options** submenu, and press $\rightarrow$ to select.
4. Press $\rightarrow$ to scroll to the following features.

Blocking Incoming Calls

When you are unable to take calls, use the Call Receive feature off to disable call reception. Your phone will inform you of incoming calls without receiving them. While this feature is on, your display will indicate number of calls.

1. Follow steps in the "Getting to Call Options..." block above to scroll to Call Receive. You will see Call ReceiveOn or Call ReceiveOff.
2. Press $\rightarrow$ to toggle between Call ReceiveOn and Call ReceiveOff.
3. Press **End** to exit, or scroll to other features.

Note: If this feature is active, the phone will beep several times when turned on.

While in this mode, your phone does not receive or store Caller ID messages.

Activating Automatic Hands-Free

Turn this feature on when you are using Hands-Free vehicular accessories. To find out more about accessories for your car, refer to "Accessory Options" on page 102.

Shortcut:

Press **Fcn**, the Smart Button, **2** **1**, and continue with step 6.

Shortcut:

Press **Fcn**, the Smart Button, **2** **8**, and continue with step 2.

1. Follow the steps in the "Getting to Call Options..." block to scroll to Automatic HF. You will see Automatic HF On or Automatic HF Off.
2. Press **→|** to toggle between Automatic HF On and Automatic HF Off.
3. Press **End** to exit, or scroll to other features.

Activating Multiple Key Answer

With Multiple Key Answer on, you can answer calls by pressing the Smart Button, any key on the upper keypad **1**-**#**, or the upper and lower volume keys.

Shortcut:

Press **Fcn**, the Smart Button, **2** **0**, and continue with step 2.

1. Follow the steps in the "Getting to Call Options..." block to scroll to Mult Key Answer. You will see Mult Key Answer On or Mult Key Answer Off.
2. Press **→|** to toggle between Mult Key Answer On and Mult Key Answer Off.
3. Press **End** to exit, or scroll to other features.

Activating Open to Answer

Note: To view Caller ID information prior to answering a call, you must turn off the Open to Answer feature.

1. Follow the steps in the "Getting to Call Options..." block to scroll to Open to Answer. You will see Open to Answer On or Open to Answer Off.
2. Press **→|** to toggle between Open to Answer On and Open to Answer Off.
3. Press **End** to exit, or scroll to other features.

To answer a call with Open to Answer set to off, press either **Send** or **→|**.

Tip: With Open to Answer set to off, you can open the phone to see the message in the display and then answer by pressing **Send** or **→|**.

Getting to Call Options...

1. Press **Fcn**, then press $\rightarrow$ to enter the menu system.
2. Press $\downarrow$ to scroll to **Phone Options** and press $\rightarrow$ to select.
3. Press $\downarrow$ to scroll to the **Call Options** submenu, and press $\rightarrow$ to select.
4. Press $\downarrow$ to scroll to the following features.

Activating Automatic Answer

Turn Auto Answer on to have your phone automatically answer incoming calls after two rings.

Note: Auto Answer does not work if keypad cover is closed.

1. Follow the steps in the "Getting to Call Options..." block to scroll to Automatic Answer. You will see Automatic Answer On or Automatic Answer Off.
2. Press $\rightarrow$ to toggle between Automatic Answer On and Automatic Answer Off.
3. Press **End** to exit, or scroll to other features.

Shortcut:

Press **Fcn**, the Smart Button, **2** **6**, and continue with step 2.

Tip: If the ringer and VibraCall™ alert are off, the phone answers without ringing or vibrating.

Getting to Phone Options...

1. Press **Fcn**, then press **→|** to enter the menu system.
2. Press **→|** or **←|** to scroll to **Phone Options** and press **→|** to select.
3. Press **→|** or **←|** to scroll to the following features.

Selecting Battery Options— Power Save Mode

This feature enables you to turn off the Power/Status Indicator. Turn this mode on to experience improved talk or standby times.

Note: Display and keypad backlighting is turned off when Power Save Mode is turned on.

1. Follow the steps in the "Getting to Phone Options..." block to select the Battery Options sub-menu. You will see Power Save Mode On or Power Save Mode Off.
2. Press **→|** to toggle between Power Save Mode On and Power Save Mode Off.
3. Press **End** to exit, or scroll to other features.

Displaying System Identification

This feature shows the System ID number that identifies the cellular system your phone is currently accessing. An even number indicates a wireline system, while an odd number indicates a non-wireline system.

1. Follow the steps in the "Getting to Phone Options..." block to enter the System Options sub-menu. You will see Display SID.
2. Press **→|** to view the System ID number. After six seconds, the phone will go back to step 2.

Shortcut:
Press **Fcn**, the Smart Button, **2 7**, and continue with step 3.

3. Press **End** to exit, or scroll to other features.

Selecting Language

This feature enables you to select the language in which your phone displays prompts and messages.

1. Follow the steps in the "Getting to Phone Options..." block above to select the **Select Language** sub-menu.
2. Press  to scroll through the language options.
3. Press  to select the language setting you want.
4. Press **End** to exit, or scroll to other features.

Using the Message Center

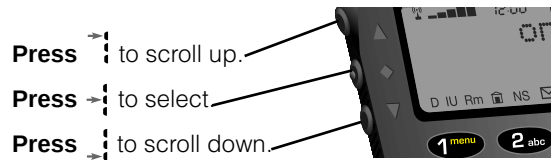
ADD SOFT ICON

The Message Menu gives you easy access to your message settings. Some Service Providers let you subscribe to a Digital Message Service that allows you to use your cellular phone like a pager. Ask your Service Provider for information about the availability of messaging in your area.

In this chapter you will learn how to <UPDATE LIST>:

- use short messaging services to view, lock/unlock, and clear messages
- use voice mail
- use caller ID
- adjust speed of your scrolling messages
- toggle the dedicated Message key for messaging or One Touch Dialing
- use the message key to access your messages

Follow these symbols as a guide for using the keys on the side of your phone:



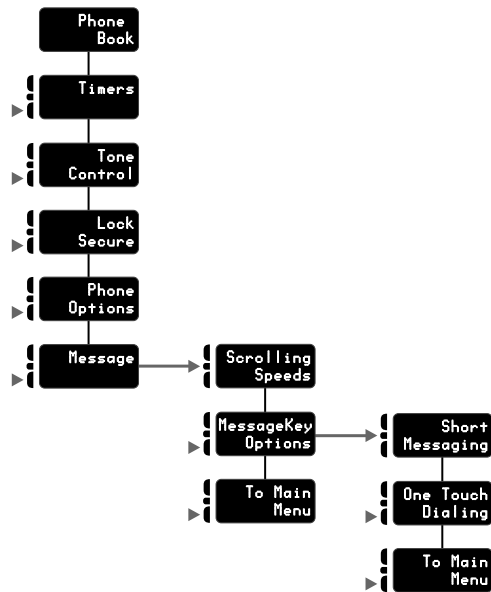
If you are already familiar with previous Motorola cellular phones, you can use your phone's **<*** and **#>** keys to scroll through the menu system.

<REWRITE THIS CHAPTER TO COMBINE ALL MESSAGE FEATURES HERE. FOR NOW, I'VE COPIED ALL SECTIONS HERE.>

Road Map for Message Center

Press  to enter the message center. <UPDATE>

Start:



Getting to Message Center

1. Press  to enter the message center.
2. Press  to scroll to the following features and press  to select.

Using Short Messaging

Short Message Service (SMS) is an optional service that may be available from your Service Provider. Contact your Service Provider to subscribe to this service.

If your Service Provider offers Short Messaging Services (SMS), you can receive alphanumeric messages on your Digital StarTAC™ phone, just like a pager. The Digital StarTAC™ saves up to 30 short messages and automatically replaces the oldest messages with the newest as they are received. You can store Call Back messages and numbers for later review. The one-touch Message Button makes viewing your messages easy.

How Your Phone Sends Message Alerts

New Message Alerts

If your phone is on and receives a new digital message, the phone alerts you in two different ways:

- Message Received appears in the display, and:
 - The message icon  flashes.
 - The phone beeps three times.
 - The status indicator flashes.

or

- Urgent Msg Received or EMERGENCY MSG RECVD appears in the display, and:

- The message icon  flashes.
- The phone beeps five times.
- The status indicator flashes.

Short Message Indicators

If a message is unread, the colon after the message number is highlighted in reverse video. After the message appears and scrolls across the display for the first time, it is denoted as a “read” message and is no longer highlighted.

If the sender has marked the message “Emergency” or “Urgent,” the display shows `Call Home`.

Setting Scrolling Speeds

Adjusting the message scrolling speed is quick and easy. See “Setting the Scrolling Speed” on page 100 for details.

Viewing a Short Message

Entering The Message Center

To enter the message center:

Press and hold .

- If the message center has messages, you will see `New XX Total YY`,
where `XX` is the number of unread messages, and `YY` is the total messages currently stored.
- If the message center has no messages, you will see `Msg Center Empty`.
- If the message center is full, you will see `Msg Memory Full`.

Tip:
Pressing  will start or stop a scrolling message. To adjust the scrolling speed, see "Setting Scrolling Speeds" on page 35.

Reading The Most Recent Message

Press  to view the most recently received message.

Retrieving a Specific Message

Enter the message number to retrieve a specific message. After a few seconds, the message begins to scroll across the display.

If a message does not match that number, Invalid Msg Number appears in the display.

Reading Subsequent Messages

When the current message has scrolled across the display:

Press  to display the next message.

Reading the Time/Date of Message

When the current message has scrolled across the display:

Press  to display the time/date stamp of the current message.

Reviewing Current Message

Press  to display the beginning of the current message once the current message has scrolled past.

Initiating a Call Back

When the current message has scrolled across the display, you can call back a number embedded in the text message.

1. Press and hold , or press  to initiate a Call Back, if a Call Back number was included in the message.

You will see Dial No.? XXXXXXXX.

If a Call Back number was not included in the text message, the phone dials the first number present in the text message.

2. Press , or press  to dial the number shown.

or

Press  to search the text message for the next call back number.

Note: While in the message center, you can enter a Call Back number at any time by using the keypad, and then pressing  to place the call.

Exiting the Message Center

To exit the message center:

Press .

or

Press and hold .

Locking and Unlocking a Message

You can lock important messages to ensure their safekeeping for later review. A locked message cannot be deleted until the message is unlocked.

Press , then press , to toggle the current message between locked and unlocked.

Msg Locked is displayed when a message is locked.

Note: If your message memory is full and a new message is received, any unlocked messages that have been read will be deleted.

Clearing Messages

Clearing the Current Message

1. Press  when the message you want to erase is on the display.

You will see Clear XX Press *, where XX is the number of the message you want to clear.

2. Press  to clear the message.

You will see *Message XX Cleared*.

or

Press  or any other key if you do not wish to clear the message.

Note: You must unlock a locked message before you can clear it. For more information, see “Locking and Unlocking a Message” on page 95.

Clear All Messages

To erase all the messages from your Message Center at once:

1. Press and hold  when you are in the message center.

You will see *Clear All Press **.

2. Press  to verify that you want all the messages cleared.

or

Press  if you decide not to clear all the messages. You are returned to the message center.

3. Press  to exit from the message center.

If all messages have been cleared and no locked messages remain in the message center, *Msg Center Empty* appears in the display.

Note: You must unlock any locked messages before they can be cleared. For more information, see “Locking and Unlocking a Message” on page 95.

Getting to Message Center...

1. Press  to enter the message center.
2. Press  to scroll to the following features and press  to select.

Using Voice Mail

(This feature updates you each time a message is sent to your voice mail number, providing you with real-time information on messages waiting to be retrieved. To hear any voice mail messages received, dial your voice mail access number or retrieve the access number from memory.

When a voice mail message is received, the  icon flashes rapidly.

1. Follow the steps in the "Getting to Phone Options..." block above to scroll to *Voice Mail*. If a voice mail message has been received, the display will show *Voice Mail XX Messages*.
2. Press  to exit, or scroll to other features.

Using Caller ID¹

Caller ID allows you to view the number of the calling party in the phone's display while the phone is ringing. Your Digital StarTAC™ cellular phone also stores the telephone numbers of the last ten incoming calls.

If the caller's phone number matches a phone number stored in the phone's memory, the phone automatically displays the name associated with that phone number. The display of the name-tag or phone number is controlled through your setting of

1. Caller ID is not available in all markets. Contact your Service Provider for availability information.

Shortcut:
Press **Rec**, then press and hold **Rec**, and continue with step 2 if you have messages.

the Name Preference feature. (See "Phone Book Display Preferences" on page 53.)

<ADD NEW TEXT: NAME IS NOT REQUIRED IN PHONE BOOK>

If you subscribe to call waiting and receive a call while another call is in progress, you hear a call waiting tone and the caller's number appears on the display. The number will automatically be stored and can be viewed after ending the call, using the procedure described on the next page.

If the caller has restricted transmission of the phone number, your phone will display **Private**. If the Calling Number ID information is not available to the cellular network, your phone will display **No ID**. This information will not be in the Caller ID list as one of the last 20 numbers dialed.

You can store any number contained in your Caller ID memory to a memory location in the same way you would save any phone number. Once the correct number is displayed, press **Sto** and a memory location or **☛*** to autoload. See "Storing with the Menu" on page 44 for more information on storing phone numbers.

To Use Caller ID

1. Follow the steps in the "Getting to Phone Options..." block to scroll to **Caller ID**. You will see **Caller ID XX Nos.** (XX) is the total numbers stored.
2. Press **→|** to enter your Caller ID number list.
3. Press **↔** to scroll through the list. The display shows the call number in the upper left corner, with the phone number of the last phone call displayed as **C0**, the next to last as **C1**, and so on, through **C9**.

If no numbers are in the caller ID list, you see **Empty**.
4. Press **Send** to dial the displayed number.

Note: To view Caller ID information prior to answering a call, you must turn off the Open to Answer feature. (See “Activating Open to Answer” on page 86.)

Clearing Caller ID

To erase all entries saved in your Caller ID memory:

1. Press and hold **Clr** when a Caller ID name and number is displayed. You will see **Clear?**.
2. Press **Sto** to clear.

or

Press **End** to cancel and leave your caller ID memory intact.

<ADD SECTIONS FROM CDMA MANUAL? PAGES 50-51>

Getting to the Message Center...

1. Press  to enter the message center.
2. Press  to scroll to the following features and press  to select.

Setting the Scrolling Speed

To adjust the scrolling speed of your incoming messages:

1. Follow the steps in the "Getting to the Message Menu..." block above to select the *Scrolling Speeds* option.
2. Press  to scroll through scrolling speed settings:
 - To scroll slowly, select *Slow Scrolling*.
 - For medium scrolling, select *Medium Scrolling*.
 - To scroll quickly, select *Fast Scrolling*.
3. Press  to exit, or scroll to other features.

Selecting Message Key Options

<WILL THIS SECTION GO AWAY WITH THE NEW MESSAGE CENTER?>

If you don't have access to a messaging service, your dedicated Message key can be used as a third One-Touch Dialing key. See "Using Super Speed Dial" on page 37 for more information on using and programming One-Touch Dialing Keys.

1. Follow the steps in the "Getting to the Message Menu..." block above to select the *Message Key Options*. You will see *Short Messaging* or *One-Touch Dialing*.

2. Press  to toggle between Short Messaging and One-Touch Dialing.
3. Press  to exit, or scroll to other features.

Reference Information

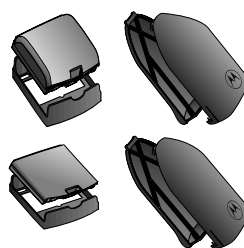
Accessory Options

An exciting line of Motorola Digital StarTAC™ accessories, now smaller and lighter than ever, can enhance and personalize your cellular experience.

Batteries

Lithium Ion batteries are different from other batteries in that you can leave them in the charger as long as you like. Nickel Metal Hydride batteries should not be left in the charger for more than 24 hours.

If your cellular phone is quickly becoming your companion, an optional auxiliary battery will give your phone a boost. Auxiliary batteries attach to the back of your phone and provide extra talk time in addition to your main battery. See “Battery Talk-Time and Standby-Time” on page 15 for battery talk-times and standby-times.



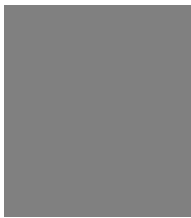
Cigarette Lighter Adapter



With the cigarette lighter adapter, you can power your phone and charge your phone's battery directly from your vehicle's cigarette lighter! In some cars, the engine must be running in order for the cigarette lighter to operate.

Desktop Charger (AC Adapter required)

The desktop charger is designed for optimal performance and compatibility with Motorola's new generation of cellular telephones. The desktop charger's pocket can charge batteries while they are attached to or separate from your phone. Now it is easy to rotate batteries and always have a charged spare. <CREATE NEW GRAPHIC>



Holster

Your Digital StarTAC™ is so small and light, it is positively wearable. Slip it in and clip it on—for the ultimate in high-tech fashion. <CREATE NEW GRAPHIC>



Note: The holster is designed for your convenience and is not meant to secure your phone under all circumstances.

Headset

The convenient headset provides both an earphone and microphone in one small piece for simple hands-free and private telephone conversations. The headset plugs directly into the jack on the top of your phone, so that you can wear your phone and move freely. Place the foam cover on the earpiece for a more comfortable fit.



When you use the headset, your phone's intelligent circuitry automatically enables the Multiple Key Answer feature so you can answer calls with any key on the side of your phone. (See "Activating Multiple Key Answer" on page 86.) You can even use the Smart Button to end calls. (See "Using the Smart Button" on page 30.) You never need to open your phone to take a call.

PCMCIA Modems

These compact modems are made for mobility, with cable attachments that plug directly into the bottom of your Digital StarTAC™. They support fax, e-mail and data transmission. The PCMCIA modem works with data devices using a standard PCMCIA Type II slot.

Hands-Free Vehicle Kit

The optional Hands-Free Kit gives you the convenience of hands-free, speaker phone operation while in your car. Full duplex operation lets you simultaneously talk and listen, so both parties can interrupt each other for a normal sounding conversation.

The Hands-Free Kit automatically powers your phone and charges its battery (even when your car's engine is turned off). The Hands-Free Kit also includes a required external antenna that can improve your signal reception and boost performance.

Accessory Warranty Information

We recommend that you use Motorola original batteries and accessories. Under its limited cellular telephone warranty, Motorola specifically disclaims any responsibility for damage caused by the use of portable cellular telephone accessories not manufactured by Motorola.

For details on the complete line of Motorola cellular accessories, see your dealer or visit our Web site at <http://www.mot.com/>.

Troubleshooting

Question	Answer
I pressed the power button, but nothing happened. What's wrong with my phone?	Make sure that you press and hold the power button. If nothing still happens, then check that you have installed a battery and that the battery is charged. For more information about batteries and charging see the sections on batteries starting with "Installing and Removing Batteries" on page 18.
My battery didn't last as long as I expected. What can I do to extend battery life?	Your battery's "talk-time" and "standby-time" are relative measurements of the battery's capacity. The more you talk on the phone, the less standby-time you will have, and vice versa. To get the most from your battery, allow it to charge fully. To charge the battery to 100% of its capacity, leave it in the charger for an extra hour after the charger's light turns green. You can also turn on the Power Save Mode feature to extend battery life. Certain features demand power from your battery and reduce battery life. If you have selected the Automatic Display of Individual Call Timer feature, the display uses battery power to remain active during each call. Turn this feature off to conserve battery energy. (See "Displaying the Individual Timer Automatically" on page 58 for more information on this feature.) Exposing your battery to extreme temperatures—below -10°C (14°F) or above 45°C (113°F)—can shorten battery life. Batteries are especially sensitive to high temperature extremes. As a good rule, always take your phone with you when you leave your car.
The display says, "Locked." How do I unlock my phone?	Enter the last three digits of your cellular number. If that doesn't work, use the factory preset lock code: 123. If all else fails, call your service provider (the company that sends you your monthly cellular bill) for assistance. (See "Locking/Unlocking Your Phone" on page 70 for more information on Security Features.)
I tried to place a call and received a fast busy signal.	This sound means that the cellular system did not process your call. For example, the cellular system may be overloaded with call attempts. To redial the number, press Send before ending your call attempt, or press End and try the call again later. (See "Redialing a Number" on page 31 for more information on redialing.)

Question	Answer
I tried to place a call and received an alternating high/low tone.	This sound means your call did not reach the cellular system. You may have dialed the number too soon after turning the phone on. Wait until the "NS" light stops blinking before placing a call. An alternating tone may also indicate that your phone's signal is blocked. Make sure you're clear of any obstructions such as bridges, parking garages, or tall buildings.
I am in my home service area, but the Roam indicator is flashing.	If your phone is programmed with more than one telephone number, you might not have switched to the number appropriate for your current location. Press Rcl # Sto to switch to the other number. See "Switching Between Numbers" on page 82 for more information on multiple phone numbers.
I tried to listen to my Voice Mail (or use a paging service, a calling card, etc.) but nothing happened.	You have probably turned off the Scratchpad tones. Place your call, enter the access numbers when prompted by the recording, then press Rcl Send. To avoid this problem in the future, follow the directions "Turning Scratchpad Tones On and Off" on page 65 to turn the Scratchpad tones on.
What if my phone beeps several times after power up?	The phone is programmed for Call ReceiveOff. See "Blocking Incoming Calls" on page 85 for information.
My phone was stolen. What should I report and to whom?	Report a stolen phone to the police and to your service provider (the company that sends you your monthly cellular service bills).

Question	Answer
I tried to place a calling card call using the internal Phone Book, but it didn't work.	You may have turned off your Scratchpad tones. Follow the directions in "Turning Scratchpad Tones On and Off" on page 65 to turn the Scratchpad tones on. Check that you stored your calling card information in the correct order, and make sure the groups of numbers are separated by pauses. The easiest way to correct the sequence may be to start from scratch. Follow the instructions on "Storing Calling Card Information" on page 47, enter your calling card information again, and store it in the same memory location as your previous attempt. Also keep in mind that when using your calling card, you must enter the number you are calling with the area code, but without the initial "1." Check with your long distance carrier for details on using your calling card.

Index

A

- accessories 102, 102–104
 - batteries 102
 - cigarette lighter adapter 102
 - desktop charger 103
 - hands-free kit 104
 - headset 103
 - holster 103
 - modem 104
- accessory connector port 13
- antenna 13
- audible timer
 - one-minute 58, 59
- authentication (A-Key) entry 77
- automatic answer 87
- automatic hands-free 85
- auxiliary battery
 - installing 18
 - removing 19

B

- batteries 102
- battery
 - auxiliary
 - installing 18
 - removing 19
 - charge times 22, 23
 - charging 20
 - desktop charger 21
 - internal charger 20
 - tips 22
 - two batteries at once 22
- checking levels 19
- cover
 - removal 16
- desktop charging 21
- disposal 16
- installing 18
- Low Battery warning 19
- main

- installing 18
 - removing 18
- maintaining 24
- overview 15
- power save mode 88
- removing 18
- standby-time 15
- storage 16
- talk-time 15
- types 15

- battery cover
 - auxiliary
 - attaching 18
 - removing 17
 - main
 - attaching 17
 - removing 17
- battery level
 - checking 19
 - indicator 19
 - messages 20
- Battery Level Indicator 26
- blocking incoming calls 85
- button
 - Message
 - defined 13
 - Smart
 - defined 13

C

- call
 - ending 28, 30
 - placing 28, 30
 - calling card call 48
 - restricting call placement 73
 - receiving 29
 - open to answer 86
 - while phone is locked 71
- Call Receive 85
- call time

- individual
 - viewing 56
- call timer
 - automatically display individual 58
 - cumulative
 - viewing 57
 - resettable
 - viewing 56
 - resetting 57
- Caller ID 97
 - clearing 99
- calling card
 - placing calling card call 48
- calling card information
 - storing 47
- cellular system
 - selecting 83
- changing your number 82
- charge times
 - battery 22, 23
- charger
 - internal 20
- chargers
 - desktop charger 103
- charging batteries 20
- checking battery levels 19
- cigarette lighter adapter 102
- clearing a memory entry 37
- connector port 13
- cumulative timer
 - viewing 57

D

- desktop charger 21, 103
 - indicator lights 21
- Digital Indicator 25
- display
 - System Identification 88

E

- earpiece 13
- ending a call 28, 30

F

- feature review 84

H

- hands-free
 - automatic 85
- hands-free kit 104
- hands-free operation 104
- headset 103
- headset jack 13
- holster 103
 - storing phone 28
- Home Only Mode 83

I

- In Use Indicator 25
- In-Building Indicator 25
- incoming calls
 - blocking 85
- indicator
 - Battery Level 26
 - Digital 25
 - In Use 25
 - In-Building 25
 - No Service 26
 - Power/Status 26
 - Roam 25
 - Short Message Service 93
 - Signal Strength 25
 - SMS Message Waiting 26
 - Voice Message Waiting 26
- indicators
 - reading 25

J

- jack
 - headset 13

K

- key answer
 - multiple 86
- key presses 14

keys
function 13

L

language
select language for display 89
last numbers dialed
displaying 31
locking phone
answering calls while phone is
locked 71
automatically 70
lock code
changing 72
viewing 72
manually 70
locking/unlocking phone 70

M

main battery
installing 18
removing 18
menus
entering 30
message
clearing 96
unlocking 95
viewing a short message 93
message alerts 92
Message Key
options 100
messages 14
locking 95
microphone 13
modem 104
Multiple Key Answer 86

N

No Service Indicator 26

O

open to answer 86
option

clearing all stored information
76
option reset 76

P

package contents 12
pause dialing 46
pauses
entering into a number 45
placing a call with pauses 46
PCMCIA modem 104
phone basics 24
phone book
clearing entry 37
display preferences 53
editing entries 50
entering a name 35
entering letters 35
entry
recalling by location 43
recalling by name 43
recalling entries
short cuts 37
recalling entry
by location 36
by name 36
storing entry 44
storing names and numbers
34
using 34
phone number
viewing your own 29, 52
phone overview 13
placing a call 28, 30
power button 13
power save mode 88
power sources
switching 22
power status messages 20
Power/Status Indicator 26
prompts, defined 14

R

recalling entry by location 36

- recalling entry by name 36
- receiving a call 29
- receiving call
 - automatic answer 87
 - multiple key answer 86
- redial
 - automatic 31
- redialing a number 31
- removing battery covers 16
- retractable antenna 13
- Reversed Preference Mode 83
- ringer
 - selecting style 64
 - suppressing 29
 - vibrating 63, 65
- Roam Indicator 25

S

- Scan A Mode 83
- Scan B Mode 83
- scratchpad
 - making notes 38
 - tones
 - turning on and off 65
- scrolling speed
 - setting 100
- Seamless Connection 22
- security options 72
 - managing 72
 - resetting 76
 - service levels 74
- service levels 74
- Short Message Service
 - clearing message 96
 - indicators 93
 - locking message 95
 - unlocking a message 95
 - viewing messages 93
- Short Message Service Waiting Indicator 26
- Signal Strength Indicator 25
- single timer 59
- Smart Button
 - using 30

- SMS Message Waiting Indicator 26
- Standard Mode 83
- standby mode 27
- storing
 - calling card information 47
- storing names and numbers 34, 44
- System Identification
 - viewing 88
- System Mode 83

T

- timer
 - automatically display individual 58
 - cumulative 57
 - individual call timer 56
 - one-minute audible 58
 - repeating audible timer 59
 - resetting 57
 - single 59
- tips, defined 14
- tones
 - turning scratchpad tones on and off 65
- turning phone off 24
- turning phone on 24

U

- unanswered call indicator 29

V

- VibraCall™ Alert 63, 65
- vibrating ringer 63, 65
- viewing your number 29
- Voice Message Waiting Indicator 26
- voice privacy 69
- volume keys 14

Patent Information

Manufactured under one or more of the following U.S. patents:

4121218	4617520	D295627	4922178	D325028	5237257	D357224	5519346
4138681	D286778	4746242	4945570	D325583	5239127	D357457	5524276
4193036	4626309	D295973	4954796	5109536	5241545	5410741	5524278
4254382	4628529	D295975	4959851	D325915	5241548	D357680	D370463
4302845	4629829	4751737	4963812	5113436	5241650	D357681	5530922
4312074	4630304	D296187	4963843	5117450	5241693	5428836	5542116
4327319	4630305	4761621	4965537	5121047	5242767	D359734	5544250
4329666	4633141	4764737	4972355	5122480	D339582	D359735	D372481
4369516	4636593	D297734	4972432	5122722	5249302	D359959	5546275
4369522	4636741	D297735	4972455	D327061	5251331	5432017	5546380
4378603	D288432	4777564	4975808	5128834	D340710	D360632	D372896
4390963	4648125	Re.32768	4984290	D328302	5260988	5438684	5551078
D269873	4649543	D299136	D314173	5142551	5261119	D361070	5559471
4398265	D288683	4797929	D315330	5142696	5262710	5442680	D374424
4400584	4654655	4798975	D315346	5146620	5263052	5446763	D374872
4400585	D289156	4800348	D315543	5148471	5276707	5448763	5572193
D270835	4662691	4802236	D315559	5148473	5278994	5448771	5574976
D271491	4667333	4809356	D315565	5148961	D343173	5453997	5577268
Re.31470	4668917	4811377	5004992	5150359	5280637	D362840	D375732
4431977	4670747	4811404	D315907	5150384	D344087	5457744	D375733
4434461	4672502	4827226	5008925	5152006	5287553	5459640	D375734
4455534	4680787	4827507	D316417	5157693	5287555	5463646	D375932
4462098	4681476	4829274	D316859	5163159	5287556	5465412	D375952
D275951	4683585	4837534	5017856	5164652	D344511	5469177	D376127
4484153	4692726	D301476	5018188	5166596	5301365	5475752	5588041
4485486	4704588	4843621	5020091	5175759	5321847	D365094	5589796
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4546329	4716391	4879533	5036532	5195106	5366826	5493714	D378366
4550426	4723305	D305427	5053924	5195108	D353131	5497126	5613229
4551696	D294257	4896124	5057762	5201069	D353361	5497382	5613863
4564821	4727306	4897873	D320780	5204977	5375143	D367640	5615233
D282169	4727583	D305717	5059885	5210793	5375258	5499394	5621763
4571595	4730195	4904549	5060294	5214675	5379324	5506490	PAT111398
4573017	4734635	4905288	D322783	5222104	D354055	D368696	
4574243	4736277	4905301	D322955	5222251	D354062	5510693	
4585957	4737976	D306293	5081674	D337332	5384825	5511235	
4602218	4740794	D306441	5083304	5230007	D356084	D369162	
D284759	4741018	D306594	D324024	5230093	5402447	5513078	
D285439	4741034	4912602	D324388	5233633	5406146	D369359	
4616314	4742562	4918732	5095503	5235492	5406562	5519303	

Other patents pending.