APPLICANT: MOTOROLA, INC. FCC ID: IHDT5YA1

INSTRUCTION MANUAL

The following is a draft copy of the instruction manual.

Welcome

Congratulations! As the proud owner of a state-of-the-art Motorola cellular phone, product superiority is yours.

All Motorola 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 TDMA StarTac cellular phone through its paces. They cooked it, steamed it, shook it, shocked it, dusted it, and dropped it—and the phone still worked! We are confident that the one you purchased will meet your own exacting standards.

Thank you for choosing Motorola and, by all means, enjoy your TDMA StarTac phone!

What's New?

The company that brought you the world's first commercially available TDMA cellular phone has done it again!

Motorola is proud to introduce the TDMA StarTac—the latest breakthrough in personal cellular communications. Using the latest advances in TDMA digital technology, the dual-mode TDMA StarTac phone automatically switches between high-capacity TDMA digital and traditional analog systems. Just look what the new TDMA StarTac phone has to offer:

Short Messaging Service (SMS)

Thanks to SMS, you can receive and store up to 10 full-length alphanumeric messages. Simply press the dedicated message button and read your messages on the large scrolling display.

In-Building Services

"One Phone Number" technology allows your TDMA StarTac to use non-public cellular systems. The In-Building feature saves you time and money.

Highlights

As one of the most sophisticated cellular phones around, your TDMA StarTac phone offers exceptional features that make life easier, more organized, and more fun! This miracle of modern technology can help you...

- conserve battery power when the phone is waiting for a call while in Sleep Mode
- receive and store pager-like alpha numeric messages on the cellular phone using the short messaging service
- receive calls discreetly with the VibraCall™ function
- know when to charge with the Dedicated Battery Level Indicator
- read more information on the scrolling two line display
- make calls in a flash with the Turbo Dial[™] function
- charge on the go with the Internal Rapid Charger and an AC Adapter or Cigarette Lighter Adapter
- navigate phone features with a user-friendly, icondriven menu interface
- remember phone numbers with the internal Phone Book.
- monitor your calls with Displayed and Audible Call Timers
- reduce roaming with two-system registration

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) C95.1 1992
- National Council on Radiation Protection and Measurement (NCRP) Report 86 1986
- 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.

Tips on Efficient Operation

For your phone to operate most efficiently:

- Extend your antenna fully.
- 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 it is 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 your drive. Always obey them. Also, if using your phone while driving, please:

- Give full attention to driving--driving safely is your first responsibility.
- Use hands-free 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 electronic 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 (6") inches 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 on.
- Should not carry the phone in a breast pocket.
- Should use the ear opposite the pacemaker to minimize the potential for interference.
- If you have any reason to suspect that interference is taking place, turn your phone off immediately.

Electronic Devices (Continued)

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 phone usage 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 in any area with a potentially explosive atmosphere and obey all signs and instructions. Sparks 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 fueling areas such as gasoline stations, below deck on boats, fuel or chemical transfer or storage facilities, vehicles using liquefied petroleum gas (such as propane or butane), areas where the air contains chemicals or particles (such as grain, dust, or metal powders), and any other area where you would normally be advised to turn off your vehicle engine.

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.

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Getting Started

This chapter tells you how to set up your TDMA StarTac cellular telephone and perform basic phone functions.

In this chapter you will learn how to:

- install and charge your phone's batteries
- place and receive calls
- read your phone's status indicators
- redial numbers
- adjust your phone's ringer and earpiece volumes
- set your phone to vibrate silently when you receive a call

Package Content Options

Typically, your TDMA StarTac cellular phone may be packed with a charger, transformer and at least one battery. Listed on the following pages, you'll find a sampling of the different batteries, battery chargers, and transformers.







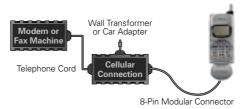
Desktop Charger (AC Adapter required

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

Accessory Options

THE Portable Cellular Connection™ Interface Analog Mode Only

Your TDMA StarTac cellular phone is data compatible in the Analog Mode, so you can send and receive faxes, e-mail, and data with Motorola data accessories. THE Portable Cellular Connection Interface connects your phone to a computer or fax machine for unparalleled convenience. THE Portable Cellular Connection Kit includes the Portable Cellular Connection Interface box with rechargeable battery, and a cable that plugs into the accessory connector on the bottom of your phone.



Hands-Free Vehicle Kit

The optional Hands-Free Kits give 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 powers the phone and charges its battery whenever your car's engine is running. An optional external antenna can improve your signal reception and boost performance.

Cigarette Lighter Adapter

The cigarette lighter adapter powers the phone and charges the battery whenever your car's engine is running.



Phone Overview

See inside front cover for a diagram

Retractable Antenna Extend for best performance.

Earpiece Ultra Compact phone speaker.

Status Indicators

In Use— Flashes when a call is in

progress.

NS No Service—Tells you the phone is

beyond the range of a cellular service area. When this indicator is lit, calls

cannot be placed or received.

Roam—Lets you know when your

phone is accessing cellular service

outside your home system.

In-Building Cellular System—Flashes

when phone accesses an In-Building

Cellular System.

Digital—Flashes when on digital

channel.

Signal Strength Indicator

Indicates the strength of the signal your phone is receiving. The stronger the signal, the better your chances of placing and receiving calls successfully.

Battery Level Indicator

Tells you the amount of charge left in your battery.

Two-line Alphanumeric Display

Displays your input from the keypad, information recalled from memory, help, and other messages.

Menu Icons

As you move through the menu, the icons flash to indicate the selected feature:

- Phone Book lets you store and retrieve numbers.
- Call Timers can monitor the length of your calls.
- thorized access.
- Phone Options/Voice Mail can be set to your specifications.
- Digital message provides access to digital messaging options.

Phone Overview (Continued)

Smart Button



The Smart Button can recall information from memory, place calls, end calls, select menu features, and toggle features ON and OFF. The symbol "*" in your display represents the Smart Button.

Volume Keys

or (

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.

Function Keys

- Turns the phone ON and OFF.
- Acts as a "shift" key to access the secondary functions of other keys.
- Recalls phone numbers from memory.
- Stores phone numbers into memory.
- Clears characters from the screen.
- Ends phone calls.
- Places or answers calls
- can be used to scroll through memory entries and menu features.



Accessory P
Connector Port n

Provides the connection for an external power supply and vehicular and

data accessories.

Headset Jack

Provides the connection for an

optional headset.

Microphone

Positioned for convenient conversa-

tion

Installing Your Batteries

About Your Batteries

Thanks to Motorola's breakthrough technology, the TDMA StarTAC phone's are smaller weigh less than any previous Motorola cellular telephone battery. Now it's easier than ever to carry a spare or two.

Your TDMA StarTAC phone can use two batteries at the same time. With an auxiliary battery attached to the back of the phone, you get even more talk-time.

You can use any single battery or battery combination to fit your individual needs. You can even extend your talk-time by attaching an auxiliary battery at any time, without interrupting your call.

Removing and Attaching Battery Covers

Your phone's batteries are shipped uncharged and fitted with protective covers. To begin using your phone, just remove the battery cover, install the battery on the phone, and charge! See "Charging Your Batteries" on page 32 when you're ready to begin charging your battery.

Save the covers to store and carry unused batteries. The covers will prevent metal objects from contacting both 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.



- 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.





Installing Your Batteries (continued)

Removing the Auxiliary Battery Cover

- 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 from the pins on the bottom of the battery.
- 4. Swing the cover away from the battery.

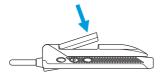
Attaching the Auxiliary Battery Cover

- Slide the curved end of the cover onto the grooved 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.



Attaching 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 Your Batteries (continued)

Attaching 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.



Information About Batteries

Battery Types

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

What Are Talk and Standby Times?

Talk-time refers to the time you can talk on your phone before the battery if fully discharged. *Standby-time* is the time that your phone is on but not used for talking.

What Is Sleep Mode?

Sleep Mode is a feature that increases your phone's standby time. If the D icon on your phone is blinking, you are in an area where sleep mode is available. If your phone is in standby mode, press any key to see if your D icon is blinking.

Sleep Mode is a network-dependent feature and is not available in all areas. Standby-times may be reduced if the cellular service provider does not offer sleep mode operation.

Talk-times are for TDMA Digital operation. All times are approximate and depend on network, signal strength, and the function selected.

Information About Batteries (continued)

Main Battery Talk and Standby Times



Slim Main Battery (Lithium Ion) E•P

up to 60 minutes talk-time or 14 hours standby-time



Standard Main Battery (Nickel Metal Hydride)

up to 60 minutes talk-time or 14 hours standby-time



Standard Extra Capacity Main Battery (Lithium Ion) E•P

up to 110 minutes talk-time or 22 hours standby-time

Keep in Mind: 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.

Auxiliary Battery Talk and Standby Times

Times shown in this section reflect the capacity of the auxiliary battery shown. 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.



Slim Auxiliary Battery (Lithium Ion) E-P

up to 110 minutes talk-time or 22 hours standby-time*



Standard Auxiliary Battery (Nickel Metal Hydride)

up to 120 minutes talk-time or 24 hours standby-time*



Extra Capacity Auxiliary Battery (Lithium Ion) E•P

up to 150 minutes talk-time or 35 hours standby-time*

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). As a general rule, 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.

Determining Your Battery's Level of Charge

Tip:

Pressing once will place the phone in charger only mode and pressing twice will turn the phone OFF. If the phone is turned off, no charging will occur.



High



Low

Tip:

Recharging quickly after the low level warning helps maintain the best battery and phone performance Your phone indicates the level of charge remaining in your battery in several ways.

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 , then press.

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 talktime remain, your phone signals you in three ways:

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

Check your phone's display area to confirm low battery signals:

Press , then **press**.

Power Status Messages

You may also see one of the following messages:

Not Available	No battery fitted; the phone is operating from external power.
Battery	Only one battery fitted; the phone is operating from this battery.
Aux Battery	Auxiliary and main batteries fitted; the phone is operating from the auxiliary battery.
Main Battery	Auxiliary and main batteries fitted; the phone is operating from the main battery.
Charging Bat- tery	Only one battery fitted; this battery is being charged.
Charging Aux Battery	Auxiliary and main batteries fitted; the auxiliary battery is being charged.
Charging Main Battery	Auxiliary and main batteries fitted; the main battery is being charged.
Fast Charge Complete	Fast charging is complete.

Charging Your Batteries

Using the Internal Charger.

Believe it or not, there's a battery charger built right into your phone! 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. You will hear a beep-tone and you will see the battery icon flashing.

See "Charge Times" on page 37 for charge times.

Tip:

If both a main and auxiliary battery are attached, the main will be charged to 95% before the auxiliary is charged.

Tip:

You can still place and answer calls while using the internal charger. Keep in mind that talking on the phone requires energy, so charging will take more time.

Using the Desktop Charger

The desktop charger's front pocket can charge batteries while they are attached to your phone, and the rear pocket can charge batteries separately.

To charge:

- 1. First, plug the AC adapter into the back of the charger, with the release tab facing up.
- 2. Plug the other end of the AC adapter into an AC wall socket.
- **3.** With battery(s) attached, place the phone into the charger's front pocket.
- **4.** You can insert an extra auxiliary or main battery into the rear pocket.

Note: 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.

Tip:

If you attach an auxiliary battery along with the main battery and insert another battery into the rear pocket of the desktop charger, you'll have three charged batteries ready to go in the morning.

Charging Your Battery (Continued)

Desktop Charger Indicator Lights

- Red means the battery is charging.
- Flashing yellow means the battery is waiting its turn.
- Green means the battery is charged within approximately 90% of its capacity and can be used. An additional hour of charging will bring your battery up to 100% capacity.
- Flashing red indicates that the battery is damaged and cannot be charged.

Charging Two Batteries On The Phone

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

To find out which battery is being charged:

Press , then **press**.

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 plan on using a particular battery for a while, it's a good idea to store the battery uncharged in a cool, dark, and dry place like your 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.

Charging Your Batteries (continued)

Quick Change Power Source

The quick change feature lets you switch power sources without losing the call in progress. If you hear a low battery warning while you are in a call, just plug in the cigarette lighter adapter.

Quick Change Battery Replacement

You can also remove your phone's battery and replace it with a charged spare without losing the call in progress. If you hear a low battery warning while you are in a call, quickly switch batteries and resume your conversation.

Be aware that a quick change must be completed in three seconds to avoid losing the call in progress. Just give your party on the line a warning before beginning this procedure.

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

Charge Times

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

Battery Type	Charge Time		
Slim Main 350 mAh Li-lon	2.5 hours		
Slim Main 500 mAh Li-lon	2.5 hours		
Extra Cap Main 900 mAh Li-lon	2.5 hours		
Standard Main 500 mAh NiMH	70 min.		
Slim Aux 900 mAh Li-lon	2.5 hours		

After the battery reaches 95%, it will begin 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

Follow these steps to turn your phone on:

- **1. Extend antenna.** Extend the antenna for best performance.
- **2. Open the phone.** Open your phone to expose the keypad.
- **3. Press** once to turn the phone on.
- Press again to turn the phone off.



Tip:

You can still place and answer calls while using the internal charger. Keep in mind that talking on the phone requires energy, so charging will take more time.

Power On Greeting

Each time you turn on your phone, it performs a self-test to let you know your phone is operational. When the self-test is finished, the display shows on or Aux, and you're ready to place or receive calls.

Other Greetings You May See

Your TDMA StarTac also displays network related messages when it's first powered ON. For example, your Service Provider may broadcast their name in your phone's display. If you don't see the name of your Service Provider, then you'll see 'Home System' when inside your local coverage area or 'Public Roam' when outside your local coverage area.

Standby Mode

To conserve energy, your phone may turn off its lights and most indicators when in standby mode. Don't worry, the display will come back the next time you press a key or open the phone.

Using the Phone (continued)

How to Hold Your Phone

Hold your cellular phone as shown below, 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 StarTAC cellular phone into its holster, make sure the main battery is facing the inside of the holster. Just clip the holster onto a belt, purse or briefcase and you'll always have it with you.



Using the Smart Button

The new Smart Button simplifies the use of the TDMA StarTac phone by allowing you to place calls, end calls, enter the menu system, toggle features on and off, and select items in the display. The Smart Button's central location—the middle key on the left side—makes it easy to feel, easy to find, and easy to use.

The symbol "*" in your display represents the Smart Button.

The Smart Button puts ease of use at your fingertips. Use the Smart Button to:

Select Items in the Display

The most basic use of the Smart Button is to select. Whenever the phone offers you choices, such as a ringer setting, press the Smart Button to select the setting you want.

Toggle 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 and press the Smart Button to select it.

Using the Smart Button (Continued)

Entering the Menu System

You can quickly access the TDMA StarTac phone's menu system with this key sequence:

Press , then **press** to access the menu.

You will see Phone Book

Placing a Call

To place a call with the Smart Button:

1. Enter a number. Enter the number you want to call.

You can also use any method you choose to recall a previously dialed or stored number. (See "Using Memory" on page 53 for more information on storing or recalling numbers.)

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

Ending a Call

To end a call with the Smart Button:

- Press and hold until you hear two tones.
 You will see * To End Call.
- **2. Press** again to end the call.

Placing a Call

Placing a Call

To place a call:

- **1. Press t** to turn you phone on.
- Extend the antenna completely for best performance.
- **3. Enter the number** you want to call.
 - Press to erase one digit at a time if you make a mistake.
 - **Press and hold ©** to clear the entire entry.
- Press and hold until you hear two tones.

Press so to place the call.

You will see Dialing XXXXXXX.

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

Press to see the entire phone number.

The phone displays the beginning of the phone number, then flashes the remaining digits.

Tip: You can use the Smart Button instead of

Ending a Call

To end a call:

Press **or close the phone**.

or

1. **Press and hold** - until you hear two tones.

You will see * To End Call.

2. Press \rightarrow again to end the call.

Receiving a Call

Your phone must be powered on to receive calls.

Answering a Call

To answer a call:

- Extend the antenna completely for best performance.
- Press or open the phone when the phone rings.

Unanswered Call Indicator

When you're not available to take a call, your TDMA StarTac keeps a count of your unanswered calls. Your phone will alert you with the message $Call \times X$, where XX is the number of calls not answered. For example, if your telephone is on and you choose not to answer a call, your display will show $Call \times X$.

Press • to erase the message, and you can begin placing calls again.

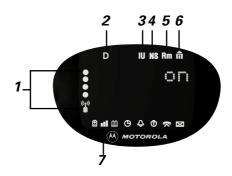
Viewing Your Own Number

To find out your phone's number:

Press ®, then **press**

Tip: To make answering calls even easier, try the Multiple Key Answer feature on page XX.

Reading the Indicators







Signal Strength Indicator (1)

The Signal Strength Indicator (SSI) tells you the strength of the connection between your phone and the local cellular system. A strong signal increases your chances of placing and receiving calls. You may see low signal strength if you're in a fringe area of the cellular system. Buildings, tunnels, and bad weather could block or interfere with reception. If the display goes blank to conserve energy, the SSI's lights flash one at a time up to the signal level you are receiving.

Reading the Indicators (Continued)

Digital Indicator (2)

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

In Use Indicator (3)

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

No Service Indicator (4)

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.

Roam Indicator (5)

The Roam (Rm) Indicator lights up when your phone accesses a cellular service outside your local cellular system. When you leave your cellular service area, your phone roams or seeks another cellular system until it finds one.

If your phone finds another cellular 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.

Reading the Indicators (continued)

In-Building Indicator (6)

The In-Building Indicator (🍙) lights up when your phone accesses an In-Building Cellular System or another non-public system.

Battery Level Indicator (7)

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

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

If you ignore these warnings, the phone automatically turns itself off when the battery charge is exhausted. Just charge the battery to resume normal operation.

Power/Status Indicator

When you are wearing your phone in its holster or just carrying it, you can check the Power/Status indicator on the top of the phone for status information.

Alternating Red/Green	Incoming Call
Flashing Green	In Service
Flashing Red	No Service
Yellow, slow flash	Roam: home type system
Yellow, fast flash	Roam: non-home type system



High



Low



Redialing a Number

Automatic Redial

Sometimes you may hear a fast busy signal, which indicates that the cellular system is busy. With Automatic Redial, your phone will call continuously for the next four minutes. When it makes a connection, the phone will ring or vibrate. When the person you are calling answers, you can begin talking.

Press • or **press** • if you hear a fast busy signal.

You will see 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, try this sequence.

- 1. **Press** to hang up.
- 2. **Press** → or **press** ◆ to redial the busy number. You will see Dialing 5551234.

Redialing Numbers (Continued)

Displaying the Last Twenty Numbers Dialed

This feature makes it easy to call any one of the last twenty numbers you've dialed.

- **1. Press •**, then **press •**, •. The display will show the last number dialed.
- **2. Press** to scroll through the last ten numbers, starting with the most recent call.
- Press and hold +{, or press , to call the number in your display.
 You will see Dialing 5551234.

Controlling Volume

Adjusting Volume

You can 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:

Press to raise or lower the volume.

To adjust the ringer volume:

- 1. **Press** ...
- **2. Press** to raise or lower the ringer volume.

Muting the Microphone

If you need some privacy while a call is in progress, try muting the microphone—you will be able to hear the person on the other end, but he or she will not hear you.

1. Press , then **press** , to mute the microphone.

You will see Mute.

Press then press again to resume normal conversation.

Controlling Volume (continued)

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 function for silent vibration with this quick sequence:

Press , then **press** to shift back and forth between ringer and vibration mode.

You will see Vibrate Only or Ring Only.

Using Memory

Do you have places to go and people to see? Too many phone numbers to remember? Let your phone remember them for you. Your TDMA StarTac phone's internal Phone Book can store up to 99 names and numbers for easy access on the go.

In this chapter you will learn how to:

- store names and numbers into the Phone Book
- recall phone numbers from memory
- dial a number with the Super Speed Dial and Turbo Dial
- instantly dial with the One-Touch Dialing Keys Follow these symbols as a guide for using the keys on the side of your phone:



Using Your Built-in Phone Book

How Your Phone Book Is Organized

Each phone number is stored in a "memory location" within the phone, numbered 01-99. You can arrange the numbers in your Phone Book for convenient recall by storing related numbers in groups of ten.

For example, store your nine most frequently called numbers in locations 01-09. Then, you can use the Turbo Dial function to call those numbers with the push of a single key. You could store business phone numbers in locations 10-19, family numbers in 20-29, friends in 30-39, and so on.

You can also store names to help identify phone numbers. Later, you can easily recall a number either by its memory location or by name that corresponds to it.

If someone you know has more than one phone number, you could quickly recall the number you need by storing it with a descriptive name, for example:



The section "Phone Book" on page 77 describes how the Phone Book can help you place calling card calls and access other automated calling systems with the touch of a button.

Storing Names and Numbers

To take advantage of your phone's internal Phone Book, first store some names and numbers into memory:

- **1. Enter the number.** Enter the phone number you want to store.
- Press to begin storing.
 The phone prompts you to enter a memory location. You will see Location. —.
- Enter the memory location. Enter the twodigit memory location where you want the sequence stored.

 \mathbf{or}

Press to store the sequence in the first available location.

or

Enter a digit. 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.** Enter a name to identify the phone number. (See the next page for details on entering names.) You will see Alpha Or *.
- 5. **Press** , or **press** , when you are finished entering the name.

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

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

Using Your Built-in Phone Book (continued)

How to Enter Letters

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



Entering a Name

To enter a name into the Phone Book:

 Enter a letter. Enter a letter by pressing a key as many times as necessary.

Enter punctuation. Enter punctuation by pressing **→** as many times as indicated by the chart below.

2	3	4	5	6	7	8	9	10
1	1	ш	,	?	\$		8.	!

2. **Press *** to advance the cursor to the next space **or**

Press ◆ or **press** ◆ to erase a letter if you make a mistake.

3. Continue storing. Continue with step 5 on the previous page when you are finished entering the name.

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

Recalling Phone Book Entries

Recalling an Entry by Name

Once you have stored names and numbers, you can recall them alphabetically and immediately place calls. One press of the Smart Button gives your instant access to the name directory.

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

Enter the first letter. Enter the first letter of the name you want to recall from memory. The display show the first name in the phone book that begins with that letter.

- 3. **Press two** times if you want to see the number stored with the name.
- Press and hold → , or press , to call the number you selected.
- Press or close the phone to end the call.

Press and hold → until you hear two tones.

When you see * To End Call, press → again to end the call.

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 location number.** Enter the two-digit memory location of the phone number you're looking for.
- 3. **Press and hold** → , or **press ,** to call the number you selected.
- Press or close the phone to end the call.

Press and hold → until you hear two tones.

When you see * To End Call, press → again to end the call.

Recalling Phone Book Entries (continued)

Clearing an Entry

To erase a memory entry:

- **1. Recall the entry.** Recall by name the entry that you want to erase.
- 2. **Press** to clear the entry. You will see Clear?.
- 3. **Press** to confirm that you want to erase the entry.

The numbered location of the cleared entry will show in the display.

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 memory location.** Enter the two-digit memory location (01-99).
- **2. Press and hold** , or **press**, 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 through on the keypad, and your call is placed.

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 Emergency Dialing" on page 113.

Making Notes on Your Phone's 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.** Enter the number into the keypad. (The person on the line can hear tones as you dial.)
- **2. Press** to end the current call, if necessary.
- **3. Press ™** to call the number you saved on the Scratchpad.

Storing Numbers while in a Call

You can also store numbers while you are in a call:

- **1. Enter the number.** Enter the number into the keypad. (The person on the line can hear tones as you dial.)
- 2. **Press** , and continue storing with step 3 in "Storing Names and Numbers" on page 55.

Using Short Messaging

If your Service Provider offers Short Messaging Services, your TDMA StarTac phone can receive alphanumeric messages just like a pager. The TDMA StarTac can save up to 30 short messages and will automatically replace the oldest messages with the newest as they are received. Call Back messages and numbers can be stored for your review. Best of all, viewing your messages is a snap thanks to Motorola's one-touch Message Button!

In this chapter you will learn how to:

- use the message key to access your messages
- initiate a Call Back with the press of a button
- lock and unlock specific messages
- · clear one or more messages

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

Press to scroll up

Press → to select

Press to scroll down

8 al 10 0 4 0

Press on the keypad to retrieve messages

How Your Phone Alerts You to a Message

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:





Setting Scrolling Speeds

Adjusting the message scrolling speed is quick and easy. See "Set Scrolling Speeds" on page 146 for details.

Viewing a Short Message

Tip: Message Button () can be used when key pad cover is closed.

Tip: Pressing
will start or
stop a scrolling
message.To
adjust the
scrolling speed,
see "Scrolling
Speeds" on page
152.

Short Message Service is an optional service which may be available from your Service Provider. Contact your Service Provider to subscribe to this service.

Entering The Message Center

To enter the message center:

Press and hold to enter the message center.

- If the message center has messages, you will see New XX Total XY.
 - 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.

Reading The Most Recent Message

Press to view the most recently received message.

Retrieving a Specific Message

Enter Message Number to retrieve a specific message.

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

After a few seconds, the message begins to scroll across the display.

Reading Subsequent Messages

When the current message has finished scrolling across the display:

Press to display the next message.

Whenever a message has finished scrolling, you can access the next message by pressing .

Viewing a Short Message (Continued)

Reading the Time/Date of Message

When the current message has finished scrolling across the display:

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

Reviewing Current Message

When the current message has finished scrolling across the display:

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 finished scrolling 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 provided as part of the message.

You will see Dial No.? XXXXXXX.

If a Call Back number was not provided as part of the text message, the phone dials the first number present in the text message.

2. Press → f, or **press** ♠ , to dial the number shown in the display.

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 press **t** place the call.

Exiting Message Center

Press to exit the message center.

or

Press and hold to exit the message center.

Locking and Unlocking a Message

Important messages can be locked 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.

The **⊕** icon flashes in the display 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

To erase 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 o r any other key if you change your mind and do not wish to clear the message.

Note: You can not clear a locked message. A locked message must be unlocked before it can be cleared. For more information, see "Locking and Unlocking a Message" on page 70.

Clearing Messages (Continued)

Clear All Messages

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

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 change your mind and do not wish to clear all the messages. You will be returned to the message center.

3. Press to exit from the message center.
If all the messages have been cleared and no locked messages remain in the message center, M≤g
Center Empty appears in the display.

Note: You can not clear locked messages. Locked messages must be unlocked before they can be cleared. For more information, see "Locking and Unlocking a Message" on page 70.

The Menu System

The TDMA StarTac cellular phone is loaded with features that can help you be more productive. The phone's user-friendly menu system helps you find what you need quickly and easily.

Each of the icons on your phone's display represents a menu:



In this chapter you will learn:

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

Navigating the Menu

Shortcut:

Experienced Motorola Users: Watch for the "Shortcuts." You will find many of the same key sequences you have used with other Motorola models!

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.

This manual uses these symbols to instruct you to use the Smart Button and the upper and lower volume keys.

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



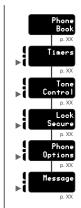
If you are already familiar with previous Motorola cellular phones, you can use your phone's \iff and \iff keys to scroll through the menu system.

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:

- Press , then press → , to enter the menu features.
- 2. Press to scroll through the menu's top level, shown here in the margin.(Notice that the icons on the bottom of your display flash as you scroll.)
- **3. Press to** exit the menu.

Detailed instructions within each chapter describe how each feature works.



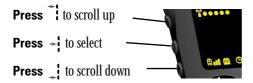
Phone Book

The last chapter told you how to store and recall phone numbers with the internal Phone Book. This chapter tells you how to access the same 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.

In this chapter you will learn how to:

- recall and store phone numbers using the menu system
- simplify automated calling systems like Voice Mail
- store calling card sequences for easy access
- · edit your memory information
- view your own phone number.
- adjust the information on the display

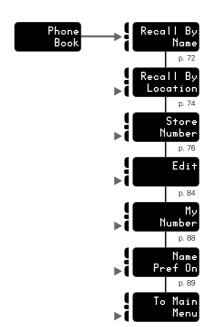
Follow these symbols as a guide for using the keys on the side of your phone.



Road Map

Press \blacksquare , then **press** \rightarrow , to enter the menu system.

Start:



Recalling Phone Book Entries with the Menu

Recalling an Entry by Name

Once you have stored names and numbers, you can recall them alphabetically with the Phone Book menu.

- Press , then press → , to enter the menu.
 You will see Phone Book.
- Press → to select Phone Book.
 You will see Recall By Name.
- Press → to select Recall By Name.
 You will see Enter 1st Letter.
- 4. Enter the first letter. Enter the first letter of the name you want to recall from memory.
 The display shows the first name that begins with that letter.
- 5. **Press** to scroll to the name you want.
- **6. Press two** times if you want to see the number stored with the name.
- Press and hold , or press , to call the number you selected.

Recalling Phone Book Entries with the Menu (continued)

Recalling an Entry by 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 with the Phone Book menu.

- 1. **Press** , then **press**, to enter the menu. You will see Phone Book.
- 2. Press → to select Phone Book.
 You will see Recall By Name.
- Press : to scroll to Recall by Location.
 You will see Recall By Location.
- **4. Press** to select Recall by Location.
- **5. Enter the location.** Enter the two-digit memory location of the number you want.
- 6. Press and hold → , or press , to call the number you selected.

Storing with the Menu

You can use the phone's menu system to store names and numbers into the Phone Book.

- Press , then press → to enter the menu.
 You will see Phone Book.
- 2. Press → to select Phone Book.
 You will see Recall By Name.
- 3. Press : to scroll to Store Number.
 You will see Store Number.
- Press → to select Store Number.
 You will see Enter Number.
- **5. Enter the number.** Enter the phone number you want to store.
- **6. Press** when you finish entering the number. **or**

Press to store the sequence in the next available location.

or

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

You will see Location —.

Storing with the Menu (Continued)

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

- **7. Enter a location.** Enter the two-digit memory location where you want the sequence stored.
- **8. Enter a name.** Enter a name to identify the phone name number, or skip this step and continue with step 9. (See "Entering a Name" on page 57 for details on entering names.)
- **9. 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 10 below, or continue with step 5 in "Storing with the Menu" on page 81 to store more numbers.

10. Press to exit the menu.

Advanced Storing

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. Enter the number.** Enter the phone number you use number to access the automated system.
- Press , then press .
 You will see Insert Pause o.
- **3. Press** → to insert a pause (□) into the sequence.
- **4. Enter the next numbers.** Enter the next group of numbers, for example, an account number or PIN number.

If the automated system requires a * or #, enter that symbol, too.

5. Insert a pause. Insert another pause, and enter the next group of numbers by repeating steps 2 through 4 as many times as necessary. You can store up to 32 digits, including pauses. When you've entered the entire sequence, store it as you would any phone number.

Advanced Storing (continued)

- **6. Press so** to begin storing. You will see Location —.
- 7. Enter a location. Enter the two-digit memory location where you want the sequence stored.

 You will see Alpha Or *.
- **8. Enter a name.** Enter a name for your sequence. (See "Entering a Name" on page 57 for details on entering names.)
- 9. **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 number.** Recall the stored number with the pause inserted.
- **2. Press and hold** → {, or **press** , to place the call.
- 3. Send the next set of numbers. When the recording prompts you for information, press → or to send the next set of stored numbers.
- **4. Press** f, or **press** as many times as necessary, to transmit all the numbers.

Storing Calling Card Information

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

You can protect your calling card information with your phone's security features. See "Lock/Security" on page 108 for more information.

- Enter a number. Enter the phone number you use to access your calling card system, usually an 800 phone number.
 Skip this step if you only dial 0.
- 2. Press , then press .
 You will see Insert Pause o.
- **3. Press** to insert a pause (o) into the sequence.
- 4. Enter the next numbers. If necessary, enter the next group of numbers.
 For example, some long distance carriers require you to dial a 0 before the number you are calling. If no further numbers are needed, skip to Step 6.
- 5. Press , then press .
- 6. Press _ to scroll to the Number Character.
 You will see Insert Number ≒1.

Advanced Storing (Continued)

7. **Press** → to insert the 炓 Character into the sequence.

This special character saves a place for the phone number you will be calling. The number will be inserted into the sequence automatically when you place the call.

- 8. Press 📵, then press 🗐.
- 9. **Press** to insert another pause, as in steps 2 and 3.
- **10. Enter the next numbers**. Enter your calling card PIN number.
- **11. Press** to store your calling card sequence. You will see Location —.
- 12. Enter a location. Enter the two-digit memory location where you want the sequence stored.
 You will see Alpha On *.
- **13. Enter a name**. Enter a name for your sequence. See "Entering a Name" on page 57 for details on entering names.
- **14. 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

After you've stored your calling card information, just recall the information. Enter the number of the person you are calling, and your phone will do the rest.

- 1. Recall the information. Recall the calling card information you've stored. (See "Recalling an Entry by Name" on page 79 and "Recalling an Entry by Location" on page 80 for more information on Recalling Numbers.)
- 2. Press before entering number.
 You will see Enter Number.
- Enter a number. 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. Send the next numbers.** Repeat step 5 to send the next group of numbers as many times as necessary.

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.

- Press , then press , to enter the menu.
 You will see Phone Book.
- 2. Press to select Phone Book.
 You will see Recall By Mame.
- **3. Press** ↓ to scroll to Edit. You will see Edit.
- 4. **Press** to select Edit.
- 5. Recall the entry. Recall the entry by location or by name. (See "Recalling an Entry by Name" on page 58 or "Recalling an Entry by Location" on page 80.)
- **6. Press** to begin editing the phone number. The display shows the name briefly, then the phone number.
- Press to erase one digit at a time.
 Press and hold to erase the entire number.
- **8. Enter numbers.** Enter your changes to the phone number.

9. Press • when you finish editing the phone number.

The display shows the location where your number is currently stored.

10. Press • 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.

- **11. Press t** to erase one letter at a time, or skip to step 13 to leave the name unchanged.
- **12. Enter letters.** Enter your changes to the name. (See "Entering a Name" on page 57.)
- **13. Press** when you finish editing the name. The display shows the new information.
- **14. 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.

15. Press • to exit the menu, or scroll to other features.

Viewing Your Own Number

Shortcut:
Press , then , for a quick look at your phone 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 pages 136 and 137).

- Press , then press → to enter the menu.
 You will see Phone Book.
- 2. Press → to select Phone Book.
 You will see Recall By Name.
- 3. Press to scroll to My Number.
 You will see My Number.
- **4. Press** → to select My Number.
- 5. **Press** to view your own phone number. Your active phone number appears on the screen. After six seconds, the phone returns to step 3.
- **6. Press to** exit the menu, 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 to see the associated name.
- On—You see the stored name first and must press
 to see the associated phone number.

To turn this feature on or off:

- Press , then press → , to enter the menu.
 You will see Phone Book.
- Press → to select Phone Book.
 You will see Recall By Mame.
- 3. **Press** to scroll to the Name Preference feature. You will see Name Pref On or Name Pref Off.
- 4. Press → to toggle between Name Pref On and Name Pref Off.
- **5. Press t** to exit the menu, 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 "Caller ID" on page 129.

Shortcut:

Press , then press the Smart Button, then, 1, and continue with step 4.

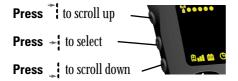
Call Timers

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.

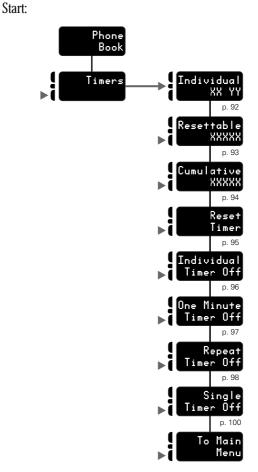
In this chapter you will learn how to:

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

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



Road Map



View 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 OFE You can also choose to have the timer display while calls are in progress. See "Display Individual Timer Automatically" on page 98.

- 1. **Press then press** → to enter the menu. You will see: Phone Book
- 2. **Press** to scroll to Call Timers. You will see: Timers
- 3. Press to select Call Timers.
 You will see: Individual XX YY
 The display will show the air-time of your last call in minutes (XX) and seconds (YY).
- **4. Press 1** to exit the menu, or you may scroll to other features.

Shortcut 1: Press ® then The twice for a quick look at this timer.

Shortcut 2: Press then press the Smart Button, then 4, 5 for a quick look at this timer

View Resettable Call Timer

Shortcut 1:
Press then three times for a quick look at this timer.

Shortcut 2:
Press then

press the Smart Button, then 4, 6 for a quick look at this 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 on page 95 to reset the timer.

- Press then press → to enter the menu.
 You will see: Phone Book
- 2. **Press** to scroll to Call Timers. You will see: Timers
- Press → to select Call Timers.
 You will see: Individual XX YY
- 4. Press to scroll to Resettable Timer.
 You will see: Resettable XXXX
 The display will show your air-time in minutes since you last reset the timer.
 - **5. Press to** exit the menu, or you may scroll to other features.

View Cumulative Timer

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

1. **Press then press** → to enter the menu. You will see: Phone Book

2. **Press** to scroll to Call Timers. You will see: Timers

Press → to select Call Timers.
 You will see: Individual XX YY

4. Press : to scroll to Cumulative Timer.
You will see: Cumulative XXXX
The display will show your air-time in minutes

since your phone was activated.

5. Press 1 to exit the menu, or you may scroll to other features.

Shortcut 1:

Press then four times for a quick look at this timer.

Shortcut 2:

Press then press the Smart Button, then 4, 7 for a quick look at this timer

Reset Timer

Shortcut 1: Press then press the Smart Button, then 4, 3 and continue with step 5.

Shortcut 2:
Press then

, T, to reset the timer

Reset this timer at the beginning of each billing cycle and you can keep a running tab of your monthly usage. After you reset the timer, it will continue to keep track of your airtime (in minutes) until you reset it again.

Keep in Mind: The shortcuts will not work if the Reset Timer is already set at zero.

- Press then press → to enter the menu.
 You will see: Phone Book
- 2. **Press** to scroll to Call Timers. You will see: Timers
- Press → to select Call Timers.
 You will see: Individual XX YY
- 4. Press : to scroll to Reset Timer.
 You will see: Reset Timer
- **5. Press** → to reset the timer.
- **6. Press 1** to exit the menu, or you may scroll to other features.

Display Individual Timer Automatically

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

- Press then press → to enter the menu.
 You will see: Phone Book
- 2. **Press** to scroll to Call Timers. You will see: Timers
- Press → to select Call Timers.
 You will see: Individual XX YY
- Press : to scroll to Individual Timer.
 You will see: Individual Timer Off or Individual Timer On
- 5. Press → to toggle between Individual Timer
 Off and Individual Timer On.
- **6. Press 1** to exit the menu, or you may scroll to other features.

Shortcut:

Press then press the Smart Button, then 4, 8 and continue with step 5.

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

One Minute Audible Timer

Shortcut:

Press then press the Smart Button, then 4, 4 and continue with step 5.

Turn this feature on to hear an audible beep 10 seconds before the end of every minute during a call. Don't worry, the party on the other end will not hear the beeps.

- Press then press → to enter the menu.
 You will see: Phone Book
- 2. **Press** : to scroll to Call Timers. You will see: Timers
- Press → to select Call Timers.
 You will see: Individual XX YY
- 4. Press : to scroll to One Minute Timer.
 You will see: One Minute Timer Off or One
 Minute Timer On
- 5. Press → to toggle between One Minute Timer Off and One Minute Timer On.
- **6. Press 1** to exit the menu, or you may scroll to other features.

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.

- Press then press → to enter the menu.
 You will see: Phone Book
- 2. **Press** to scroll to Call Timers. You will see: Timers
- 3. Press to select Call Timers.

 You will see: Individual 88 YY
- 4. Press _: to scroll to Repeating Timer. You will see: Repeat Timer Off or Repeat Timer On
- 5. Press → to toggle between Repeat Timer Off and Repeat Timer On.
 The prompt to enter seconds will appear only if you have turned the feature on. If you have turned it off, you will see: Repeat Timer Off
- **6. Enter seconds.** Enter the number of seconds you would like between audible beeps.

You will see: Beep At YYY Secs

- 7. Press + to set the timer.
 The phone will confirm by displaying your entry:
 Set At YYY Secs
- **8. Press 1** to exit the menu, or you may scroll to other features.

Shortcut: Pres s then press the Smart Button, then 4, 1 and continue with step 5.

Single Timer

Shortcut:

Press then press the Smart Button, then 4, 2 and continue with step 5

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. Press then **press** \rightarrow to enter the menu.

You will see: Phone Book

2. Press to scroll to Call Timers.

You will see: Timers

3. Press • to select Call Timers.

You will see: Individual XX YY

- 4. Press _: to scroll to Single Timer.
 You will see: Single Timer Off or Single
 Timer On
- Press → to toggle between Single Timer Off and Single Timer On.

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

6. Enter seconds. Enter the number of seconds you would like between audible beeps.

You will see: Beep At YYY Secs

- 7. Press to set the timer.

 The phone will confirm by displaying your entry:

 Set At YYY Secs
- **8. Press 1** to exit the menu, or you may scroll to other features.

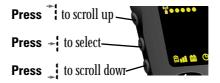
Tone Controls

If you've been reading along diligently, this may be a good time for a break—put your feet up and have some fun with the Tone Controls. Use these features to select silent vibration mode, personalize your phone's ringer styles, or turn the ringer off for some peace and quiet.

In this chapter you will learn how to:

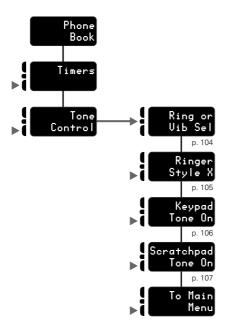
- · choose from nine different ringer styles
- activate and deactivate the VibraCall function.
- silence the keypad
- silence the scratchpad

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



Road Map

Start:



VibraCall Selection

Shortcut 1:

Press , then press to toggle the VibraCall function on and off.

Shortcut 2:

Press then press the Smart Button, then 3, 0 and continue with step 4.

Shortcut 3:

Press then press the Smart Button, then 3, 1 and continue with step 4.

Using this innovative feature, you can choose to be alerted to incoming calls using the vibrating ringer, the ringer, both, or neither. Motorola's VibraCall option is ideal for situations where ringing may not be appropriate, or in noisy places where you might not hear the ringer.

- 1. **Press then press** *{ to enter the menu. You will see: Phone Book
- 2. Press : to scroll to Tone Controls.
 You will see: Tone Controls
- Press → to select Tone Controls.
 You will see: Ring Or Uib Sel
- 4. Press to select this feature.The display will show your current ringer setting.
- **5. Press** to scroll through your choices:



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

- **6. Press** when you reach the setting you want.
- **7. Press to** exit the menu, or you may scroll to other features.

Select Ringer Style

The TDMA StarTac phone gives you nine different ringer styles to choose from. After you choose a style, the phone will give you a brief sample of your new alert sound, or vibrate if you have the VibraCall function selected.

- Press then press → to enter the menu.
 You will see: Phone Book
- 2. **Press** to scroll to Tone Controls.
 You will see: Tone Controls
- **3. Press** → to select Tone Controls. You will see: Ring Or Vib Sel
- 4. Press : to scroll to Ringer Style.

 The phone will show your current ringer style's number: Ringer Style X
- 5. Press to select this feature.
 You will hear a sample of your current ringer style.
 You will see: Select 1-9
- 6. Press through to hear the different ringer styles, or you may scroll through the ringer styles.
- Press when you reach the ringer style you want.
- **8. Press 1** to exit the menu, or you may scroll to other features.

Keypad Tones

Shortcut:

Press the press the Smart Button, then 3, 2 and continue with step 5.

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.

Keep in Mind: The other party will still hear tones.

- 1. **Press then press** → to enter the menu. You will see: Phone Book
- 2. Press : to scroll to Tone Controls.
 You will see: Tone Controls
- **3. Press** → to select Tone Controls.

 You will see: Ring Or Vib Sel
- 4. Press : to scroll to Keypad Tones.
 You will see: Keypad Tone On or Keypad Tone
 Off
- Press to toggle between Keypad Tone On and Keypad Tone Off.
- **6. Press to** exit the menu, or you may scroll to other features.

Scratchpad Tones

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.

Press then press → to enter the menu.
 You will see: Phone Book

2. Press : to scroll to Tone Controls.
You will see: Tone Controls

Press → to select Tone Controls.
 You will see: Ring Or Vib Sel

4. Press ____ to scroll to Scratchpad Tones. You will see: Scratchpad Tone On or Scratchpad Tone Off

- Press to toggle between Scratchpad Tone On and Scratchpad Tone Off.
- **6. Press 1** to exit the menu, or you may scroll to other features.

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

Press then **press** to send the tones.

Shortcut:

Press the press the Smart Button, then 3, 3 and continue with step 5.

Lock/Security

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

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

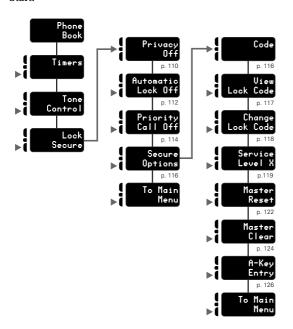
Note: Follow these symbols as a guide for using the keys on the side of your phone.



Road Map

Press then **press** to enter the menu system.

Start:



Voice Privacy

By activating your TDMA StarTac's Voice Privacy feature, you are making a request to your cellular system to search for a Voice Privacy channel with each call. If, for any reason, a Voice Privacy channel is not available (or your call is "handed off" to a cell where a Voice Privacy channel is not available) you will hear a series of short beeps alerting you that the call is no longer private.

Voice Privacy must be selected prior to placing a call in order for that call to search for a Voice Privacy channel.

Keep in Mind: 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:

- Press then press → to enter the menu.
 You will see: Phone Book
- 2. Press _: to scroll to Lock/Security.
 You will see: Lock Secure
- 3. Press → to select Voice Privacy.

 You will see: Privacy Off or Privacy

 Preferred
- Press → to toggle between Privacy Off and Privacy Preferred.
- **5. Press 1** to exit the menu, or you may scroll to other features.

Locking/Unlocking Your Phone

Locking Your Phone Automatically

When you turn this feature on, your phone will automatically lock itself each time the phone is turned off.

- Press then press → to enter the menu.
 You will see: Phone Book
- 2. Press : to scroll to Lock/Security.
 You will see: Lock Secure
- Press → to select Lock/Security.
 You will see: Privacy Off or Privacy
 Preferred
- 4. Press : to scroll to Automatic Lock.
 You will see: Automatic Lock Off or Automatic
 Lock On
- Press → to toggle between Automatic Lock Off and Automatic Lock On.
- **6. Press 1** to exit the menu, or you may scroll to other features.
- 7. **Press** or **press** to confirm and lock your phone.

Shortcut: Pres s then press the Smart Button, then and continue with step 5.

Locking/Unlocking Your Phone (Continued)

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

Locking Your Phone Manually

You can lock your phone manually at any time to help prevent unwanted use. Once locked, you can leave your phone ON or turn it OFF and the phone remains locked.

- 1. Press @
- 2. Press & hold for at least one full second.
 You will see: Look?

Unlocking Your Phone

Unlocking your phone is quick and easy. Once your phone is on, just enter your three-digit lock code to unlock your phone. (See pages 116 and 118 for more information on your lock code.)

You can still receive calls when the phone is locked. Follow these steps to answer the incoming call.

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

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

Activating Emergency Dialing

The Priority Call feature allows the Turbo Dial function to dial from memory location 01 — even when the phone is locked! To make good use of this feature, store an emergency number or the phone number of a close relative or friend that you would like to contact in case of emergency.

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

To activate Priority Call:

- Press then press → to enter the menu.
 You will see: Phone Book
- 2. Press : to scroll to Lock/Security.
 You will see: Lock Secure
- Press to select Lock/Security.
 You will see: Privacy Off or Privacy Preferred
- Press → to toggle between Priority Call Off and Priority CallOn.
- **6. Press 1** to exit the menu, or you may scroll to other features.

Shortcut:

Press the press the Smart Button, then 2, 9 and continue with step 5.

Security Options

The Secure Options sub-menu contains a number of security-minded features to put your mind at ease. For your protection, you must enter the six-digit security code in order to access these features.

The factory programmed lock code used to unlock the phone is 123, and the six-digit security code is 000000. These may have been changed at the time your phone was activated.

View Lock Code

If you need to refresh your memory, the View Lock Code feature displays the currently active three-digit lock code.

- Press then press → to enter the menu.
 You will see: Phone Book
- 2. Press : to scroll to Lock/Security.
 You will see: Lock Secure
- Press → to select Lock/Security.
 You will see: Privacy Off or Privacy
 Preferred
- 4. Press to scroll to Secure Options.
 You will see: Secure Options
- **5. Press** → to enter the sub-menu. You will see: Code ———

Shortcut:

Press then press the Smart Button, then 3, 3 and continue with step 5.

View Lock Code (Continued)

Enter code. Enter your six-digit security code to continue.

You will see: Uiew Lock Code

- 7. **Press** + to display your three-digit lock code. It appears for a few seconds.
- **8. Press** exit the menu, or you may scroll to other features.

Change Lock Code

To change your three-digit lock code:

- Press then press → to enter the menu.
 You will see: Phone Book
 - 100 WIII 3CC. I HOHE DOOK
- Press : to scroll to Lock/Security.You will see: Lock Secure
- Press → to select Lock/Security.
 You will see: Privacy Off or Privacy
 Preferred
- 4. Press to scroll to Secure Options.
 You will see: Secure Options
- **5. Press** → to enter the sub-menu. You will see: Code

Change Lock Code (Continued)

6. Enter code. Enter your six-digit security code to continue.

You will see: View Lock Code

7. Press _ to scroll to Change Lock Code.

You will see: Change Look Code

8. Press \rightarrow to select this feature.

You will see: Enter Code-

9. Enter new code. Enter the new three-digit code.

You will see: Changed To XXX

10. Press • exit the menu, or you may scroll to other features.

Restricting Call Placement

You may want to restrict call placement or hide memory information when loaning your phone to others. Each of your phone's eight service levels offers a different combination of access privileges and restriction.

Level 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	1 Memory 1-10
Level 2: calls can be placed from all memory locations, no dialing from keypad, no memory edit or storage	2 Memory Only
Level 3: calls can be placed manually from the keypad only, no access to memory information, no memory edit or storage	3 Keypad Only
Level 4: standard setting, no restrictions	4 Standard Setting
Level 5: seven-digit (local) dialing only, DTMF tones are not transmitted to prevent calling card call	5 Local Only
Level 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
Level 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
Level 8: no edit, storage, or recall from memory locations 1-10	8 Hide Turbo

Restricting Call Placement (Continued)

To select a service level:

1. **Press** then **press** to enter the menu.

You will see: Phone Book

2. **Press** to scroll to Lock/Security.

You will see: Lock Secure

3. Press → to select Lock/Security.

You will see: Privacy Off or Privacy

Preferred

4. Press to scroll to Secure Options.

You will see: Secure Options

5. Press \rightarrow to enter the sub-menu.

You will see: Code ----

6. Enter code. Enter your six-digit security code to continue.

You will see: View Lock Code

7. Press to scroll to Service Level.

You will see: Service Level X

- 8. **Press** to select this feature.

 The phone will display your current service level.
- **9. Press** to scroll through the service level settings.

See the chart on previous page.

Restricting Call Placement (Continued)

- **10. Press** \rightarrow to select the service level you want.
- 11. If you select Level 7, the phone will prompt 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 will confirm the allowed range.

You will see: 1-XX Allowed

12. Press exit the menu, or you may scroll to other features.

Resetting All Options

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

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

- Press then press → to enter the menu.
 You will see: Phone Book
- 2. Press : to scroll to Lock/Security.
 You will see: Lock Secure
- 3. Press → to select Lock/Security.

 You will see: Privacy Off or Privacy

 Preferred
- 4. Press it to scroll to Secure Options.
 You will see: Secure Options
- **5. Press → to** enter the sub-menu. You will see: Code ———
- **6. Enter code**. Enter your six-digit security code to continue.

You will see: View Lock Code

7. Press : to scroll to Master Reset.
You will see: Master Reset

Resetting All Options (Continued)

Press + if you want to reset all your phone's options back to their factory settings.

You will see: Standard Setting

or

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

Press exit the menu, or you may scroll to other features.

Clearing All Stored Information

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

Keep in Mind: Once you select this feature, the process cannot be canceled or reversed.

- Press then press to enter the menu.
 You will see: Phone Book
- 2. Press : to scroll to Lock/Security.
 You will see: Lock Secure
- Press → to select Lock/Security.
 You will see: Privacy Off or Privacy
 Preferred
- 4. Press to scroll to Secure Options.
 You will see: Secure Options

Shortcut:

Press then press the Smart Button, then 5, 2 and continue with step 5.

Clearing All Stored Information (Continued)

5.	Press - to enter the sub-menu
	You will see: Code ———

6. Enter code. Enter your six-digit security code to continue.

You will see: Uiew Lock Code

7. Press : to scroll to Master Clear.
You will see: Master Clear

8. **Press** + if you want to clear the memory and reset all your phone's options back to their factory settings. This will take a few seconds.

You will see: Busy

or

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

9. Press exit the menu, or you may scroll to other features.

Authenticating Users

Dual mode phones such as the TDMA StarTac are equipped with an authentication feature called the A-Key. The A-Key acts much like a PIN number and helps prevent unauthorized users from using your TDMA StarTac. Contact your Service Provider for your personalized A-Key number.

Note: This feature should only be programmed once.

To activate your TDMA StarTac's A-Key feature:

- Press then press → to enter the menu.
 You will see: Phone Book
- Press : to scroll to Lock/Security.
 You will see: Lock Secure
- 3. Press to select Lock/Security.
 You will see: Privacy Off or Privacy
 Preferred
- 4. Press to scroll to Secure Options.
 You will see: Secure Options
- 5. **Press** → to enter the sub-menu. You will see: Code
- **6. Enter code.** Enter your six-digit security code to continue.

You will see: View Lock Code

7. Press : to scroll to A-Key Entry feature.
You will see: A-Key Entry

Authentication (A-Key) Entry (Continued)

8. Press - to select.

The display will show the phone's active phone number

If the phone number displayed is not the number you want to program the A-Key to, press either or to switch to the second programmed phone number. This will be the phone number your phone will operate with once you exit the A-Key feature.

9. Enter A-Key. Enter your new A-Key (6- to 26-digit number) as provided by your Service Provider.

Press to correct any errors.

- **10. Press** to validate the A-Key entry.
 - If the A-Key was input correctly, you will see "Ualid".
 - If was input incorrectly, you will seem "Invalid". Re-enter your A-Key.
- **11. Press 1.** to exit the menu, or you may scroll to other features.

Phone Options

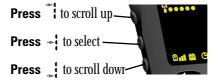
The Phone Options menu lets you adjust the way your phone sends and receives calls.

You can tweak 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 cellular phone numbers
- · select the system mode
- · review your phone's feature settings
- place calls automatically at a later time
- select features for vehicular use
- conserve battery power
- view numbers with Caller ID

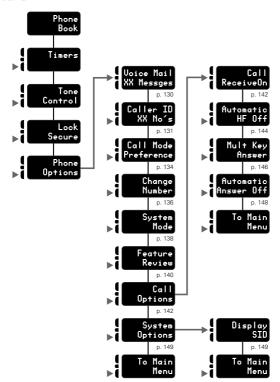
Note: Follow these symbols as a guide for using the keys on the side of your phone.



Road Map

Press then **press** to enter the menu system.

Start:



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 sicon will flash rapidly.

- 1. **Press then press** → to enter the menu. You will see: Phone Book
- 2. Press to scroll to Phone Options.
 You will see: Phone Options
- 3. Press → to select Phone Options.

 If a voice mail message has been received, the display will show: Uoice Mail XX Messages
- **4. Press 1** to exit the menu, or you may scroll to other features.

Caller ID

This feature allows you to view the number of the calling party in the phone's display while the phone is ringing. Additionally, your TDMA StarTac stores the telephone numbers of the last ten incoming calls.

Should the caller's phone number match a phone number that you have stored in the phone's memory, the phone will automatically display the name associated with that phone number. The display of the name-tag or phone number is controlled through your setting of the Name Preference feature. For more information on Name Preference, see page 89.

If you subscribe to call waiting and receive a call while another call is in progress, you will hear a call waiting tone and the caller's number will appear 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, "No ID" will display.

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 ■ and a memory location or ■ to autoload. See the Phone Book section on page 50 of this manual for more information on storing phone numbers.

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

Caller ID (Continued)

Using Caller ID

- Press then press → to enter the menu.
 You will see: Phone Book
- 2. Press to scroll to Phone Options.
 You will see: Phone Options
- 3. Press → to select Phone Options.

 You will see: Uoice Mail XX Messages
- 4. Press : to scroll to the Call ID feature.

 You will see: Caller ID XX Nops

 (XX) is the number of Caller ID numbers stored.
- **5. Press** to see the Caller ID number list.
- 6. **Press** to scroll through the list.

 The display will show the call number in the upper left corner, with the phone number of the last phone call being "C0'", the second to the last "C1'", and so on, through "C9'". If there are no numbers in the caller ID list, then you will see: Empty.
- **7. Press 5** to dial the displayed number.

Shortcut:

Press then press & hold and continue with step 5 if you have messages.

Caller ID (Continued)

Clearing Caller ID

To erase all entries saved in your Caller ID memory:

1. Press & hold when a Caller ID name and number is displayed.

You will see: Clear?

2. Press **5** to clear.

or

Press • to cancel and leave your caller ID memory intact.

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.

Keep in Mind: When powered on, your TDMA StarTac will first search for a digital channel. If no digital channel is available, your phone will switch to an analog channel.

- Press then press → to enter the menu.
 You will see: Phone Book
- 2. Press to scroll to Phone Options.
 You will see: Phone Options
- Press → to select Phone Options.
 You will se: Voice Mail XX Messages
- 4. Press : to scroll to Call Mode Preference.
 You will see: Call Mode Preference

Digital Mode

- Press to select a Dual, Analog, or Digital channel.
 You will see: Dual Mode or Analog Mode or
- **6. Press** to toggle between the Dual, Analog, or Digital modes.
- **7. Press 1** to exit the menu, or you may scroll to other features.

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

Switching Between Phone 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	Ĥ1
Non-wireline type with phone number 2	Ĥ2
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: If your cellular service is from a:

- non-wireline carrier—the display will indicate that your home system is system A
- wireline carrier—the display will indicate that your home system is system B

Switching Between Phone Numbers (Continued)

To switch your phone number:

- Press then press to enter the menu.
 You will see: Phone Book
- 2. **Press** to scroll to Phone Options. You will see: Phone Options
- Press → to select Phone Options.
 You will se: Voice Mail XX Messages
- 4. Press : to scroll to Change Number.
 You will see: Change Mumber
- 5. **Press** + to select the Change Number feature.

 The active phone number will appear in the display, for example: 5155551515
- **6. Press** to switch to your other phone number. In this case: 7085551212
- **7. Press** to confirm the new setting.
- **8. Press 1** to exit the menu, or you may scroll to other features.

Selecting a Cellular System

Your Service Provider configures the System Mode feature when you receive a cellular phone number. If you want to get into the nitty-gritty of your phone's operation, read on. System Mode allows you to select the type of cellular system your phone will access.

- Press then press → to enter the menu.
 You will see: Phone Book
- 2. Press to scroll to Phone Options.
 You will see: Phone Options
- Press + to select Phone Options.
 You will se: Voice Mail XX Messages
- 4. Press : to scroll to System Mode.
 You will see: System Mode
- **5. Press** to select the System mode feature.

Continued...

Shortcut: Press ^{®®} then → and continue with step 6.

System Mode (Continued)

Continued from page...

6. Press to scroll through the system mode settings:

Standard Mode Your phone first seeks a home type system, then a non-home type system	
If home is non-wireline (type A)	Std AB
If home is wireline (type B)	S+d BA
Reversed Preference Mode Your phone first seeks a non-home type system, then a home type system. (This mode may be useful in fringe areas or certain roaming situations	
If home is non-wireline (type A)	Scan BA
If home is wireline (type B)	Scan AB
Home Only Mode The phone will not operate outside its home system.	Home
Scan A Mode The phone will operate only within nonwire- line (type A) systems.	Scan A
Scan B Mode The phone will operate only within wireline (type B) systems.	Scan B

Shortcut:

Press , then press the Smart Button, then , and continue with step 5.

- 7. **Press** to select the system mode setting you want.
- **8. Press 1** to exit the menu, or you may scroll to other features.

Feature Review

After you've spent some time adjusting your phone's settings, use this feature to review the selections you've made. When you enter Feature Review, your phone will display any features that you have changed from their default factory settings.

Keep in Mind: Settings cannot be changed while scrolling through Feature Review. Feature Review is simply an opportunity to review your current settings.

- Press then press → to enter the menu.
 You will see: Phone Book
- 2. Press to scroll to Phone Options.
 You will see: Phone Options
- Press + to select Phone Options.
 You will se: Voice Mail XX Messages
- 4. Press : to scroll to Feature Review.
 You will see: Feature Review

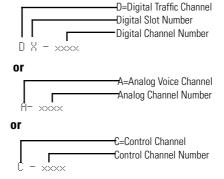
Continued...

Feature Review/Channel Status (Continued)

Continued from page...

5. Press : to select Feature Review.

The display message will indicate whether the phone is accessing a Digital Channel, an Analog Channel, or a Control Channel. The message will be displayed in the following format:



Note: The icon will flash when on a digital control channel.

6. Press or press or to scroll through any features you have changed from their default settings.

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

7. Press to exit the menu.

Call Options

Blocking Incoming Calls

There are times when you can't be bothered. Turn 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. **Press** then **press** to enter the menu.

You will see: Phone Book

- 2. Press to scroll to Phone Options.
 You will see: Phone Options
- Press to select Phone Options.
 You will se: Voice Mail XX Messages
- 4. Press : to scroll to Call Options.
 You will see: Call Options
- 5. Press → to enter the sub-menu. You will see: Call ReceiveOn or Call ReceiveOff
- Press → to toggle between Call ReceiveOn and Call ReceiveOff.
- Press to exit the menu, or you may scroll to other features.

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

Shortcut:

Press , then press the Smart Button, then , and continue with step 7.

Call Options (Continued)

Automatic Hands-Free

Turn this feature on when you are using Hands-Free vehicular accessories. To find out more about accessories for your car, turn to page 17.

1. **Press** then **press** \rightarrow to enter the menu.

You will see: Phone Book

2. Press to scroll to Phone Options.

You will see: Phone Options

3. Press → to select Phone Options.

You will se: Voice Mail XX Messages

4. Press to scroll to Call Options.

You will see: Call Options

 $0 \pm \epsilon$

5. Press - to enter the sub-menu.

You will see: Call Receive On or Call Receive

6. Press to scroll to Automatic Hands-Free.

You will see: Automatic HF On or Automatic HF Off

- 7. Press → to toggle between Automatic HF On and Automatic HF Off.
- **8. Press 1** to exit the menu, or you may scroll to other features.

Shortcut:

Press , then press the Smart Button, then , and continue with

step 7.

Call Options (Continued)

Multiple Key Answer

Why fumble for the wey to answer calls? With Multiple Key Answer on, you can answer calls by pressing the Smart Button, any key on the upper keypad , or the upper and lower volume keys.

- Press then press → to enter the menu.
 You will see: Phone Book
- 2. Press to scroll to Phone Options.
 You will see: Phone Options
- Press to select Phone Options.
 You will se: Voice Mail XX Messages
- 4. Press to scroll to Call Options.
 You will see: Call Options
- 5. Press → to enter the sub-menu.

 You will see: Call Receive On or Call Receive

 Off
- 6. Press

 to scroll to Multiple Key Answer.

 You will see: Mult Key Answer On or Mult Key

 Answer Off
- Press + to toggle between Mult Key Answer On and Mult Key Answer Off.
- **8. Press to** exit the menu, or you may scroll to other features.

Shortcut:

Press , then press the Smart Button, then , and continue with step 7.

Call Options (Continued)

Automatic Answer

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

Note: If keypad cover is closed the phone will not Auto Answer.

Press then press → to enter the menu.
 You will see: Phone Book

- 2. Press : to scroll to Phone Options.
 You will see: Phone Options
- 3. Press → to select Phone Options.

 You will se: Voice Mail XX Messages
- Press → to scroll to Call Options.
 You will see: Call Options

Press + to enter the sub-menu.

You will see: Call Receive On or Call Receive Off

- 5. Press it to scroll to Automatic Answer.
 You will see: Automatic Answer On Or Automatic
 Answer Off
- 6. Press → to toggle between Automatic Answer
 On and Automatic Answer Off.
- **7. Press 1** to exit the menu, or you may scroll to other features.

Shortcut:

Press , then press the Smart Button, then 2,

•6, and continue with step 7.

Tip: If the ringer and VibraCall functions are off, your phone will answer without ringing or vibrating.

Display System Identification

This feature will show you the System ID number that identifies the cellular system your phone is currently accessing. An even number indicates a wireline system and an odd number indicates a non-wireline system.

- Press then press → to enter the menu.
 You will see: Phone Book
- 2. Press : to scroll to Phone Options.
 You will see: Phone Options
- Press to select Phone Options.
 You will see: Voice Mail XX Messages
- 4. Press to scroll to System Options.
 You will see: System Options
- 5. Press → to enter the sub-menu. You will see: Display SID
- **6. Press** to view the System ID number. After six seconds, the phone will go back to step 5.
- Press to exit the menu, or you may scroll to other features.

Shortcut:

Press , then press the Smart Button, then , and continue with step 6.

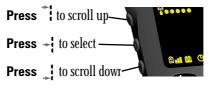
Message Menu

Scroll over to the Message Menu for 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:

- · adjust speed of your scrolling messages
- toggle the dedicated Message key for messaging or One Touch Dialing

Note: Follow these symbols as a guide for using the keys on your phone.

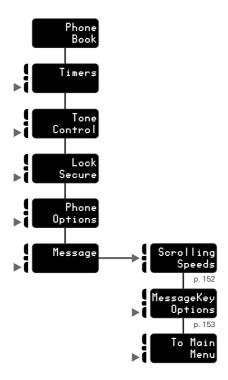


Press to retrieve messages

Road Map

Press then **press** to enter the menu system.

Start:



Set Scrolling Speeds

Are your incoming messages scrolling across the display too slowly? To adjust the scrolling speed:

1. Press \leftarrow then press \leftarrow to enter the menu.

You will see: Phone Book

2. Press to scroll to Message.

You will see: Message

3. **Press** - to select Message.

You will see: Scrolling Speeds

4. Press - to select Scrolling Speeds.

You will see: Medium Scrolling

- **5. Press** to scroll through the scrolling speed settings.
 - To scroll slowly: Slow Scrolling
 - For medium scrolling: Medium Scrolling
 - To scroll quickly: Fast Scrolling
- **6. Press 1** to exit the menu, or you may scroll to other features.

Message Key Options

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 page 58, "One-Touch Dialing" for more information on using and programming One-Touch Dialing Keys.

- Press then press → to enter the menu.
 You will see: Phone Book
- 2. **Press** it to scroll to Message. You will see: Message
- Press → to select Message.
 You will see: Scrolling Speeds
- Press : to scroll to Message Key Options.
 You will see: Message Key Options
- 5. Press + to select Message Key Options.
 You will see: Short Messaging or One-Touch
 Dialing
- 6. Press → to toggle between Short Messaging and One-Touch Dialing.
- **7. Press 10** to exit the menu, or you may scroll to other features.

Reference Information

Troubleshooting

- **Q.** I pressed the power button, but nothing happened. What's wrong withmy phone?
- **A.** Check that you have installed a battery and that the battery is charged. See pages 21-33 for more information about batteries and charging.
- Q. My battery didn't last as long as I expected. What can I do to extend battery life?
- **A.** Keep in mind that your battery's "talk-time" and "standby-time" are a relative measurement 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, make sure you allow it to fully charge. 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.

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 page 96 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 of thumb, always take your phone with you when you leave your car.

Troubleshooting (Continued)

- **Q.** The display says, "Locked." How do I unlock my phone?
- **A.** Try entering the last three digits of your cellular number. If that doesn't work, try using 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 pages 108-127 for more information on your phone's Security Features.)
- **Q.** I tried to place a call and received a fast busy signal.
- A. 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 before ending your call attempt, or press and try the call again later. (See pages 46-47 for more information on redialing.)
- **Q.** I tried to place a call and received an alternating high/low tone.
- **A.** This sound means your call did not reach the cellular system. Most likely, you dialed the number too soon after turning the phone on. Wait until the red "NS" light stops blinking before placing a call.
 - An alternating tone may also indicate that your phone's signal is blocked. Make sure the antenna is fully extended and you're clear of any obstructions, like bridges, parking garages, tall buildings, etc.
- **Q.** I am in my home service area but the Roam indicator is flashing.
- A. 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
 , , , , to switch to your other number. See page 136 for more information on multiple phone numbers.

Troubleshooting (Continued)

- **Q.** I tried to listen to my Voice Mail (or use a paging service, a calling card, etc.) but nothing happened.
- A. You have probably turned off the Scratchpad tones. Place your call, enter the access numbers when prompted by the recording, then press , . To avoid this problem in the future, follow the directions on page 107 to turn the Scratchpad tones on.
- **Q.** What if my phone beeps several times after power up?
- **A.** The phone is programmed for Call ReceiveOff. See page 142 for more information.
- **Q.** I tried to place a calling card call using the internal Phone Book, but it didn't work.
- A. You may have turned off your Scratchpad tones. Follow the directions on page 107 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 page 80, 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.
- **Q.** My phone was stolen. What should I report and to whom?
- **A.** Report a stolen phone to the police and to your service provider (the company that sends you your monthly cellular service bills).

Glossary

A

AC adapter An accessory device that allows you to power your phone and charge any attached batteries from a wall outlet.

AMPS (Advanced Mobile Phone System) A cellular technology that operates on 832 channels.

accessory connector port A socket on the bottom of the phone where you can attach accessories such as an AC adapter, battery charger, cigarette lighter adapter or data accessories.

air-time The amount of time you spend using a cellular system. Especially, the time between successfully placing a call and terminating a call.

antenna The device on your phone that sends and receives cellular signals.

C

cellular carrier One of the two competing organizations in a given geographic area that owns and operates a cellular system.

cellular system The cellular equipment in a given geographic area that relays signals to and from individual cellular telephones and the landline telephone system.

cigarette lighter adapter An accessory device that allows you to power your phone and charge any attached batteries from a car's cigarette lighter.

D

DTMF tones See Dual Tone Multi-Frequency tones.

default A feature's original setting as pre-programmed in the factory.

Dual Tone Multi-Frequency tones tThe tones that your telephone transmits when you press a key on the keypad. These tones are used to access automated calling systems such as Voice Mail, paging services, banking-by-phone, etc. These tones will also be heard by the party on the other line if you use the Scratchpad while a call is in progress. Synonymous with Scratchpad tones.

F

fringe area The outermost range of a cellular system where cellular signals are weak.

function keys The seven keys on your phone's keypad used to perform specific tasks.

H

home system The local cellular system where you obtain your cellular service.

home type system A cellular system of the same type as your local cellular system. See also non-home type system, and system type.

I

indicator A light on your phone that gives you information about your phone's status.

icon A symbol at the bottom of the phone's display that corresponds to a main feature menu. See also main menu.

L

landline The telephone system used for conventional office and home phones.

Lithium Ion (LiIon) A battery technology used in personal cellular telephones. Lithium Ion batteries provide more energy capacity than Nickel Metal Hydride batteries of the same weight.

lock To prevent unauthorized access to the cellular telephone.

lock code A three-digit code used to unlock a locked phone.

M

memory location A space in the internal Phone Book where you can store a telephone number and a name. Each of the Phone Book's 99 memory locations (numbered 01-99) can hold up to 32 digits and 14 letters.

main menu The first level of the menu system hierarchy, which contains the six main feature menus: Phone Book, Call Timers, Tone Control, Lock/Security, Phone Options, Message.

menu feature Any feature that can be accessed through the menu system.

menu system The hierarchical arrangement of your phone's features that allows for quick, intuitive access.

message A feature that allows the user to view pager-like alphanumeric messages.

modem An electronic device that allows a computer to send and receive data through a telephone line.

N

name directory An alphabetical list of the names and telephone numbers you have stored into your phone's internal Phone Book.

Nickel Cadmium (NiCd) A battery technology used in personal cellular telephone batteries.

Nickel Metal Hydride (NiMH) A battery technology used in personal cellular telephone batteries.

non-home type system A system type different from your home system. See also home type system and system type.

non-wireline See system type.

Number Character A special character used in a calling card sequence to save a place for the telephone number you will call when you use your calling card.

P

pause A special character that tells your phone to "pause" or wait for your input before sending a group of numbers stored in memory.

prompt A message requesting input.

R

road map The visual representation of your phone's menu system provided throughout this manual.

roam To use a cellular system outside of your home system, usually when you travel beyond the range of your home system.

S

SID See System Identification.

Scratchpad A memory feature that automatically remembers the most recent number entered into the keypad.

Scratchpad tones The tones that your telephone transmits when you press a key on the keypad. These tones are used to access automated calling systems such as Voice Mail, paging services, banking-by-phone, etc. These tones will also be heard by the party on the other line if you use the Scratchpad while a call is in progress. Synonymous with Dual Tone Multi-Frequency tones.

scroll To move backward or forward through a list; for example: to move backward or forward through the menu system or the name directory using either the side keys or the and keys.

security code A six-digit code used to access sensitive features in the Secure Options sub-menu of the Lock/ Security menu.

service provider A company affiliated with a cellular carrier that provides cellular service to its customers cellular signal. The radio waves that carry information between your cellular phone and the cellular system.

signal See cellular signal.

Smart Button The middle key on the side of your phone used to access the Phone Book's name directory, send calls, end calls, enter the menu system, select features, and toggle features on and off.

Speed Dial To use this feature, enter the two-digit location of your number, 01-99, then press and hold Smart Button or press and the call is placed.

standby-time The amount of time that your phone is left on to receive calls.

status indicator See indicator.

sub-menu A secondary level of your phone's menu system hierarchy.

System Identification A five-digit number that identifies your home cellular system. An even number indicates a wireline system and an odd number indicates a non-wireline system. See also system type.

system mode A setting that determines the system type that your cellular phone will access.

system type A designation that indicates one of the two competing cellular carriers in a given geographic area. The non-wireline carrier operates on the "A" block of cellular frequencies, and the wireline carrier operates on the "B" block of cellular frequencies.

T

talk-time The amount of time that you spend talking on the phone.

toggle To switch between two possible options; for example: on vs. off.

Turbo Dial[™] **function** To use this feature, press and hold a number on the keypad, ◆ through ◆, and your call is placed.

TDMA (Time Division Multiple Access) TDMA is an efficient method of providing digital cellular communication by allowing several different conversations on the same carrier frequency.

V

VibraCall™ function Motorola's silent vibration mode that discreetly alerts you to incoming calls.

volume keys Located on the side of your phone, the upper and lower volume keys are used to adjust ringer and keypad volume. They also scroll within the menu system and the name directory.

W

wireline See system type.

Patent Information

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

· · · · · · · · · · · · · · · · · · ·	, a anaon ono o		ronoving old.	paromo
4121218	4648125	4829274	5036532	5233633
4138681	4649543	4837534	5053924	5235492
4193036	D288683	D301476	5057762	5237257
4254382	4654655	4843621	D320780	5237237
4302845	D289156	4845772	5059885	5241545
4312074	4662691	D302015	5060294	5241548
4327319	4667333	4851966	D322783	5241650
4329666	4668917	4868576	D322955	5241693
4369516	4670747	4870686	5081674	5242767
4369522	4672502	D303656	5083304	D339582
4378603	4680787	4876552	D324024	5249302
4390963	4681476	4879533	D324388	5251331
D269873	4683585	D305427	5095503	D340710
4398265	4692726	4896124	D325028	5260988
4400584	4704588	4897873	D325583	5261119
4400585	D292578	D305717	5109536	5262710
D270835	4706036	4904549	D325915	5263052
D271491	D292920	4905288	5113436	5276707
Re.31470	4710724	4905301	5117450	5278994
4431977	4711361	D306293	5121047	D343173
4434461	4715063	D306441	5122480	5280637
4455534	4716319	D306594	5122722	D344087
4462098	4716391	4912602	D327061	5287553
D275951	4723305	4918732	5128834	5287555
4484153	D294257	4922178	D328302	5287556
4485486	4727306	4945570	5142551	D344511
4486624	4727583	4954796	5142696	5301365
D276809	4730195	4959851	5146620	5321847
4491972	4734635	4963812	5148471	D348880
D277667	4736277	4963843	5148473	5349588
4504834	4737976	4965537	5148961	5359696
D278708	4740794	4972355	5150359	5361400
4523155	4741018	4972432	5150384	5363071
4546329	4741034	4972455	5152006	5365549
4550426	4742562	4975808	5157693	D352497
4551696	D295627	4984290	5163159	5366826
4564821	4746242	D314173	5164652	D353131
D282169	D295973	D315330	5166596	D353361
4571595	D295975	D315346	5175759	5375143
4573017	4751737	D315543	5175874	5375258
4574243	D296187	D315559	D332261	5379324
4585957	4761621	D315565	5182749	D354055
4602218				
	4764737	5004992	D332785	D354062
D284759	D297734	D315907	5185566	5384825
D285439	D297735	5008925	5187809	D356084
4616314	4777564	D316417	5193223	5402447
4617520	Re.32768	D316859	5195106	5406146
D286778	D299136	5017856	5195108	5406562
4626309	4797929	5018188	5201069	D357224
4628529	4798975	5020091	5204977	D357457
4629829	4800348	5020092	5210793	5410741
4630304	4802236	5020093	5214675	D357680
4630305	4809356	5020093	5222104	D357680 D357681
4633141	4811377	5028859	5222251	5428836
4636593	4811404	5029044	D337332	D359734
4636741	4827226	5029233	5230007	D359735
D288432	4827507	5031028	5230093	D359959

Patent Information (Continued)

5432017	5475752	D368696	5546275	D376127
D360632	D365094	5510693	5546380	5588041
5438684	D365817	5511235	D372896	5589796
D361070	5486843	D369162	5551078	5590177
5442680	5487184	5513078	5559471	5594778
5446763	5488335	D369359	D374424	5594951
5448763	5488649	5519303	D374872	D377792
5448771	D366872	5519346	5572193	D377934
5453997	5493198	5524276	5574976	5604050
D362840	5493714	5524278	5577268	5606730
5457744	5497126	D370463	D375732	D378366
5459640	5497382	5530922	D375733	5613229
5463646	D367640	5542116	D375734	5613863
5465412	5499394	5544250	D375932	5615233
5469177	5506490	D372481	D375952	5621763

Other patents pending.

В

Batteries
Desktop charging 34, 38
Maintaining 38

D

Desktop charging of your battery 34, 38