

## **USERS MANUAL INFORMATION**

1. The following Antenna Installation Guidelines will be shipped with each product:.

## **ANTENNA INSTALLATION GUIDELINES**

### **IMPORTANT:**

To meet the FCC's RF Exposure Guidelines, the antenna should be installed so there is at least 30 cm of separation between the occupants of the vehicle and the antenna.

2. A draft copy of the users manual follows:



**MOTOROLA**

USER'S GUIDE

**2950**

**MOBILE/CARRY PHONE**

*Mobile*

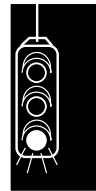
*Cellular*

*Telephone*

**DRAFT**

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## Welcome

Thank you for selecting Motorola – a world leader in cellular technology.

All Motorola cellular phones are designed and manufactured in the United States to meet Motorola's exacting specifications and world-class quality standards. These phones withstand our rigorous durability tests including temperature, humidity, shock, dust, vibration, and a drop test.

Product superiority is yours with Motorola.

- For information about your product or accessories for your product, please call Motorola at:  
1-800-331-6456 TTY: 1-888-390-6456  
1-800-461-4575 (Canada)

Please visit us at:  
**www.mot.com**

- For any information about your cellular service, please call your service provider (Carrier).

Carrier's Name \_\_\_\_\_

Carrier's Phone Number \_\_\_\_\_



- You will need to have the following information when you inquire about your phone or service. Your ESN (electronic serial number) and MSN (mechanical serial number) are located on the transceiver of your telephone.

ESN Number \_\_\_\_\_

MSN Number \_\_\_\_\_

Model Number \_\_\_\_\_

Cellular Phone Number \_\_\_\_\_

- **Unlock Code** — The sequential code of 123 is the standard unlock code programmed into all phones by the factory. It is often changed to the last three digits of your cellular phone number by the carrier. For easy access to this unlock code in the future, please list it here now: \_\_\_ \_\_\_. (Please contact your place of purchase if your unlock code has been changed and you do not have this information.)

Warranty Expiration Date \_\_\_\_\_

Date of Purchase \_\_\_\_\_



## General Safety Information

### IMPORTANT Safety Information For Wireless Mobile Phones

#### Exposure to Radio Frequency Signals

Your wireless mobile 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 wireless phones. Those guidelines are consistent with the safety standards previously set by both U.S. and international standards bodies:

ANSI C95.1 (1992)\*

NCRP Report 86 (1986)\*

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) when used as described under "Phone Operation".

\*American National Standards Institute; National Council on Radiation Protection and Measurements; International Commission on Non-ionizing Radiation Protection.



#### Phone Operation

Do not operate your mobile telephone when a person is within 4 inches (10 centimeters) of the antenna.

A person or object within 4 Inches (10 centimeters) of the antenna could impair call quality and may cause the phone to operate at a higher power level than necessary and expose that person to RF energy in excess of that established by the FCC RF Exposure Guidelines.

#### 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.

#### Driving

Check the laws and regulations on the use of wireless telephones in the areas where you drive. Always obey them. The use of these devices may be prohibited or restricted in certain areas. 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 wireless phone antenna 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 antenna more than six inches from their pacemaker when the phone is turned ON;
- If you have any reason to suspect that interference is taking place, turn your phone OFF immediately.

### **Other Medical Devices**

If you use any other personal medical device, consult the manufacturer of your device to determine if they are 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**

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

### **Blasting Areas**

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

### **Potentially Explosive Atmospheres**

Turn your phone OFF and do not remove the battery when in any area with a potentially explosive atmosphere and obey all signs and instructions. Sparks, from your battery, in such areas could cause an explosion or fire resulting in bodily injury or even death.

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

### ***Introduction***

The cellular telephone you have selected represents the state-of-the-art in cellular telephones today. The listing below shows just a few of the exceptional features that your telephone provides.

- Seven-character 14-segment LCD display
- 104 memories, including last number recall and scratch pad
- Three One-Touch Dial Keys
- Auto Answer
- Five Call Timers
- Two-system Registration
- Multiple Key Answer
- Distinctive Ringer Tones

To help you become familiar with your telephone's features, this manual will take you through a logical step-by-step learning procedure. The tabs at the edge of the manual mark the different categories that the telephone's operations have been broken into. The respective sub-categories are noted in black bars.













## Phone Overview

- ① **Operating Display and Status Indicators**  
Provide a visual indication of telephone numbers and messages associated with mobile telephone service.  
**Power Light** – Displays when a call is in progress.  
**In Use** – Displays when a call is in progress.  
**No Svc** – Displays when the unit is out of service range of a cellular system. Calls cannot be placed or received.  
**Roam** – Displays when the unit is within range of a cellular system other than your home registered system.
- ② **Three One-Touch Dialing Keys**  
Allow direct access to important phone numbers and carrier network services.
- ③ **Volume Keys**  
Adjust earpiece, ringer, and speaker volume.  
Also:
  - ▶ scrolls forward.
  - ▼ scrolls backward.









#### ④ Control Keypad

-  Recalls and displays telephone numbers stored in memory.
-  Clears the last digit entered when pressed and released. Press and hold to clear the entire display.
-  Initiates a call or answers a call.
-  Turns the phone on and off.
-  Stores telephone numbers into any of the memory locations.
-  Terminates a call in progress.

#### ⑤ Function Key

Used in combination with other buttons for specific user-programmed functions (e.g., ,  activates lock mode).

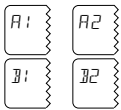
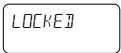
### Turn Phone On and Off

1. If installed in your vehicle, your phone should turn on and off with the vehicle's ignition. If it does not, or if the phone is in a bag configuration, press .
2. Press  again to turn unit off.

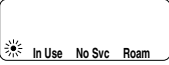
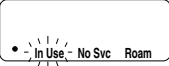
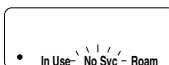
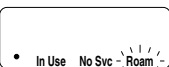
### Start-up Self Tests

Each time the telephone is turned on, it performs a series of self tests, sounds a tone, and lights all display positions and status indicators to check their operation.

### Display Messages

Message	Explanation
	<ul style="list-style-type: none"> <li>• If your phone is programmed for two cellular systems, one of these messages will appear in the display upon power up.</li> <li>• These are reminders as to which system and phone number are currently in use.</li> </ul>
	<ul style="list-style-type: none"> <li>• Indicates that the phone has been locked and cannot send or receive calls until unlocked. Refer to page 49, "Electronic Lock".</li> </ul>

## Start-up Status Indicators

Indicators	Explanation
	<p><b>On/Lock Indicator (dot)</b></p> <ul style="list-style-type: none"> <li>Lights steadily to indicate the phone is on and fully operative</li> <li>Lights steadily to indicate the phone is locked and will not place calls</li> </ul>
	<p><b>In Use Indicator</b></p> <ul style="list-style-type: none"> <li>Lights steadily while a call is in progress</li> </ul>
	<p><b>No Svc (No Service) Indicator</b></p> <ul style="list-style-type: none"> <li>Lights steadily if phone is beyond range of a cellular service area</li> <li>Calls cannot be placed or received while <i>No Svc</i> is lit</li> </ul>
	<p><b>Roam Indicator</b></p> <ul style="list-style-type: none"> <li>If flashing, you are accessing a service area outside of your home system.</li> <li><b>Steady Illumination</b> — Roaming on a home type system</li> <li><b>Flashing</b> — Roaming on a non-home type system</li> </ul>

## Place a Call

1. With power on, enter the number you wish to call.
2. Press **SEND**. (You may leave the handset mounted while dialing if an external microphone is present.)

The **In Use** indicator will illuminate. Once your party answers, bring the handset to your ear. Or leave the handset mounted and direct your conversation to the Hands Free microphone (if present) for a hands free call.

### To Correct an Error

To clear the last digit entered, press and quickly release **CLEAR**.

To clear the entire entry, press and hold **CLEAR** until the entire entry is erased.

### If Entering More Than Seven Digits

You can call a phone number with up to 32 digits, but only the last seven digits will display.



When recalling a stored phone number that is longer than seven digits, the display will flash the memory location number and the last ten digits of the number.

**EXAMPLE** Recall memory location 01 that contains the 14-digit number 12345678901234.  
*01: 567 / 8901234 will alternately display.*

To review the overflow digits from the above example, press **RECALL**. The phone will take you back to the beginning of the phone number, then flash up to seven digits at a time — 1234567 / 8901234 — until the end of the stored phone number is reached.

## Unsuccessful Call Attempts

If you hear one of the following signals, you have not successfully completed your call.

<b>Tone</b>	<b>Description</b>
<b>Fast Busy (reorder signal)</b> 	<b>Cellular System Busy</b> Press <b>[SEND]</b> again before ending the unsuccessful call attempt to automatically redial the call (see "Automatic Redial", below), or press <b>[END]</b> and dial the call again.
<b>Alternating High/Low Tone (intercept)</b> 	<b>Cellular System Could Not Complete the Call</b> You may have tried to place a call before the ON/LOCK indicator was lit to let you know your phone was fully operative. Either press <b>[SEND]</b> again to redial, or press <b>[END]</b> and dial the call again.
<b>Slow Busy Signal</b>	<b>Called Party's Line is Busy</b>

### Automatic Redial

Your telephone includes a convenient feature designed to make repetitive call attempts when a cellular system is busy.

If you receive an alternating high/low signal (intercept) or the fast busy tone (reorder signal) followed by **SEND TO REDIAL** in the display when attempting to place a call and wish to retry the call, press **[SEND]** before ending the unsuccessful call attempt. **REDIAL** is then displayed.

Your telephone will make the call attempt continuously over the next four minutes. If four

minutes is insufficient time, press **[SEND]** to begin another cycle. If the call attempt is successful, the phone will ring to alert you of the connection. You may terminate Automatic Redial by turning off the phone or by pressing **[END]**.

**NOTE** *Automatic Redial applies when the system is busy and will not engage when the called party's line is busy.*

### End a Call

Press **[END]** or return the handset to its mount.

The **In Use** indicator will extinguish. If you have activated the Automatic Hands Free feature, you must press **[END]** to terminate the call.

### Receive a Call

Lift the handset to your ear or press **[SEND]** if an external microphone is present.

Power must be on to receive calls.

### Call in Absence Indicator

If your phone is on and an incoming call is unanswered, **CALL** is displayed.

Press **[Clear]** or **[END]** to cancel the message and clear the display.

In carry phone configuration, the display will go blank after 6 seconds in order to conserve battery energy.

Reactivate the display by pressing any key except **[Clear]**, **[END]**, or **[Power]**.

**NOTE** *The phone will not display or retrieve the phone number of the calling party.*

## Hands Free Operation

(with optional HF Microphone)

### Place a Hands Free Call

1. Leaving the handset mounted, dial the number you wish to call.
2. Press **SEND**.
3. When the called party answers, direct your conversation to the Hands Free microphone typically mounted on your vehicle's sun visor. The *In Use* indicator will remain on and *HF* will display for the duration of the call.
4. Press **END** to terminate the call.

### Receive a Hands Free Call

1. Press **SEND**.
2. Direct your conversation to the Hands Free microphone. The *In Use* indicator will remain on and *HF* will display for the duration of the call.
3. Press **END** to terminate the call.

### Manual Handset to Hands Free Operation

1. To switch from the handset to Hands Free operation, press **Fcn**, **6**.  
*MUTE* will display. Note that *M* for Mute appears on **6**.
2. Return the handset to its mount.
3. Press **Fcn**, **6** again and *HF* will display.
4. Direct your conversation to the microphone.

## Automatic Hands Free

1. Press **Fcn**, **1**.
2. Scroll the menu by pressing **▲** or **▼** until *HF AUTO NOSWITCH* displays.
3. Press **Clear** once to toggle this feature on, and again to toggle it off.
4. To exit the Feature Menu, press **END**.

This feature allows you to automatically go to Hands Free operation without pressing **Fcn**, **6**.

To switch from Hands Free to Handset operation, just lift the handset while in a call. To return to Hands Free operation, hang up the handset and begin speaking.

### Enhanced Simplex Hands Free

In certain systems, you may experience audio feedback while using Full Duplex Hands Free operation, the normal operating mode. This situation can usually be alleviated by slightly reducing the speaker volume. In extreme cases, you may want to switch to Enhanced Simplex Hands Free operation. This operation will not allow interruption of the party that is speaking.

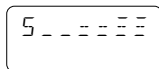
1. Press **Fcn**, **1**.
2. Scroll the menu by pressing **▼** or **▲** until *HF PREFOFF* displays.
3. Press **Clear** once to toggle this feature on, and again to toggle it off.
4. To exit the Feature Menu, press **END**.

## Signal Strength Meter

The Signal Strength Meter (SSM) represents the relative strength of the signal received by your phone. The SSM is displayed as a bar graph following the letter S at the left side of the display. The S alone represents the lowest strength with each additional bar representing a stronger signal.



Weak Signal



Strong Signal

The SSM appears every time you turn your phone on, unless this feature is turned off through the "Feature Menu" (refer to page 39).

To best utilize the SSM, you should familiarize yourself with the relative signal strength levels and their associated call-in-progress qualities.

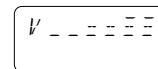
Any messages, such as **LOCKED**, which display as a result of activation of a feature will take priority over the SSM. You will not see the SSM displayed in these cases.

## Volume Meter

The Volume Meter represents the current volume setting and will display whenever you adjust the volume control. The volume level is displayed as a bar graph following the letter V at the left side of the display, with each additional bar representing a higher volume setting.



Lowest Volume Setting



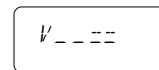
Highest Volume Setting

The number of bars represents the number of volume steps for speaker, earpiece, and ringer volume. The volume levels can be adjusted by the use of and .

## Speaker Volume

1. With the handset mounted, press and hold to raise the volume.
2. To lower the volume, press and hold . The number of bars on the Volume Meter will decrease.

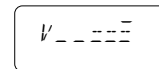
The maximum number of bars that will display is four.



## Earpiece Volume

Lift the handset and use and as described above.

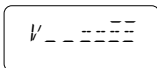
The maximum number of bars that will display is five.



## Ringer Volume

Press **Fon** and use **▲** and **▼** as described in the "Volume Meter" on page 23.

The maximum number of bars that will display is six.



## Display Own Phone Number

1. Press **Recall**, **#**.

The phone number that is currently active will be displayed.

2. When you have finished viewing, press **Clear**.

## Switch to Second Phone Number

1. Press **Recall**, **#**, **Store**.

The display will go blank to confirm the switch and the newly activated number will display.

2. When you have finished viewing, press **Clear**.

Your telephone can operate over two different home systems, if you have made proper arrangements with your Cellular System Operator. Both are designated as your "home system" but are accessed with separate telephone numbers.

While you may switch from one system to the other, only one of the two can be active at any given time. Calls are placed and received through the active system only.

If you have two phone numbers programmed into your phone, each time the telephone is turned on, it displays a message indicating which home system type and phone number is currently active.

The message shows the system type and phone number applied, as follows:

<i>System Type and Phone Number</i>	<i>Display</i>
Non-wireline or A type with phone number 1	A 1
Non-wireline or A type with phone number 2	A 2
Wireline or B type with phone number 1	B 1
Wireline or B type with phone number 2	B 2

If a call is placed to the inactive phone number, the caller will receive the recorded "Not In Service" message.

When you turn your phone on, the telephone will remember which system was active when you turned it off. That system will stay active until you change to the other system with the sequence **Recall**, **#**, **Store**. However, you cannot switch systems during a call.

### Storing Information in Memory

Your telephone provides memory capable of storing up to 99 frequently called phone numbers as well as a seven-character name tag. Upon entering a phone number in memory, the phone will prompt you to store an associated name. If you are not interested in creating a name tag for the selected location, alpha entry may be bypassed and the phone number alone can be stored.

### Selecting a Memory Location

There are two ways to select a memory location:

- select a specific location number
- autoload to store the information in the next sequentially available location.

### Store to a Location Number

1. Enter phone number to be stored, up to 32 digits.
2. Press **[Store]**.
3. Enter the two-digit location number in which you wish to place the entry.
4. The phone is automatically in Alpha Entry Mode. Enter a name, or bypass Alpha, go to step 5.
5. Press **[Store]**.

Phone will confirm storage by displaying memory location number.

**NOTE** If *FULL* displays, refer to "Memory Protect" on page 29.

### Memory Autoload

1. Enter phone number to be stored.
2. Press **[Store]**, **[\*]**.
3. The phone is automatically in Alpha Entry Mode. Enter a name or continue to step 4.
4. Press **[Store]**.

Phone will confirm storage by displaying the autoload memory location number.

**NOTE** If *FULL* displays, refer to "Memory Protect" on page 29.

This procedure automatically stores memory entries into the next available memory location. This method serves particularly well if you do not remember the next available memory location.

### Storing a Phone Number and a Name

1. Enter phone number to be stored.
2. Press **[Store]**.
3. Enter two-digit location number or press **[\*]** for Autoload.

The phone will then automatically prompt for alphabetic name input. The Alpha Entry Mode display will flash *ALPHA* \_.

4. Utilize the alphanumeric keypad to enter up to 7 letters as described in the example on page 28. **[#]** advances to the next position. **[\*]** backspaces, if necessary. Repeat until name tag is complete.
5. Press **[Store]**.

Phone will confirm storage by displaying memory location number.



**NOTE** Your phone is capable of storing up to 32 numeric characters or a combination of 16 numeric and seven alpha characters per memory location.

## Details on Utilizing Alpha Entry Mode

Once in Alpha Entry Mode, you can enter letters using your numeric keypad. For example, "A" is at the first press of **[2<sup>A</sup>]**, "B" is at the second press of **[2<sup>B</sup>]**, and "C" is at the third press of **[2<sup>C</sup>]**.

Key	1st Press	2nd Press	3rd Press	4th Press
<b>[2<sup>A</sup>]</b>	A	B	C	
<b>[3<sup>D</sup>]</b>	D	E	F	
<b>[4<sup>G</sup>]</b>	G	H	I	
<b>[5<sup>J</sup>]</b>	J	K	L	
<b>[6<sup>M</sup>]</b>	M	N	O	
<b>[7<sup>P</sup>]</b>	P	Q	R	S
<b>[8<sup>V</sup>]</b>	T	U	V	
<b>[9<sup>W</sup>]</b>	W	X	Y	Z

**EXAMPLE** To enter "Bob" and his phone number 555-1234 into memory location 01:

1. Enter phone number by pressing **[5<sup>5</sup>]**, **[5<sup>5</sup>]**, **[5<sup>5</sup>]**, **[1<sup>1</sup>]**, **[2<sup>2</sup>]**, **[3<sup>3</sup>]**, **[4<sup>4</sup>]**.
2. Press **[Store]**, **[0<sup>01</sup>]**, **[1<sup>01</sup>]**. The display will flash *ALPHA* ..
3. Press **[2<sup>B</sup>]** twice to select "B". Press **[#]** to advance to the next position. Press **[6<sup>M</sup>]** three times for "O". Press **[#]**. Press **[2<sup>B</sup>]** twice more to select the second "B".

4. Press **[Store]**. The display will flash *01* to confirm that the name and phone number were successfully stored in memory location 01.

**NOTE** If *FULL* displays, refer to "Memory Protect" below.

## Memory Protect

The directory has an automatic memory protect feature which prevents the accidental overwriting and loss of previously stored names and numbers in memory. If you attempt to store a number or name in a location that already contains an entry, the phone will display *FULL*, and the name/number in that memory location. The display will then alternate between the previously stored number and *CHANGE?*.

If you wish to save to that location, thus erasing the old information, press **[Store]**. If you wish to store the entry in an alternate location, Press **[END]**, **[Store]** and the alternate location number.

## Recalling/Scrolling from Memory

Information stored in memory can be recalled or reviewed by location number. You may also scroll the memory during a call. Pressing **[END]** once in this case will cancel scrolling, but not the call.

## Recalling/Scrolling by Location Number

1. Press **[Recall]**.
2. Enter the desired two-digit location number.  
or

Press **[0]**, **[1]** and press **[#]** or **[▲]** to begin scrolling from the beginning of the stored locations.

The display will show the location number, then the first ten digits of the number. If Name Preferred is selected, up to seven characters of the name will display. (Refer to "Name Preference" on page 41 for more details.)

**3. Press [SEND] to place a call to the number displayed.**

Use **[▲]** and **[▼]** to scroll forward and backward.

To scroll from a specific two-digit location, press **[RECALL]**, then the location number where you wish to begin scrolling.

The phone will display an apostrophe (') after the memory location number to indicate that memory scrolling is active.

### Last Number Recall

1. Press **[RECALL]**, and the last number entered on the keypad will appear.
2. Press **[SEND]** to place a call to the last number displayed.

### Recalling Last 10 Numbers Dialed

1. Press **[RECALL]**, **[0]**, **[0]**.  
The display will show **L1'** followed by the name or number of the most recently placed call.
2. Scroll the last ten numbers dialed with **[\*]** and **[#]**.
3. To place a call to this number, press **[SEND]**.

This feature allows you to refer to or redial any of the last ten numbers to which calls were placed.

The numbers are stored in the order placed and always represent the ten most recent calls. Successive calls to the same number are stored only once, and all are retained when the unit is shut off.

**NOTE** When scrolling, you may observe that a location number is skipped. This may be caused by pressing **[SEND]** when the display is empty and does not mean that a number has been lost.

### Super Speed Dialing

1. Enter the location number.
2. Press **[SEND]**.

Memory locations 1-99 are equipped with Super Speed Dialing capability. Once information is stored in these locations, Super Speed Dialing allows you to place a call without pressing **[RECALL]**.

The number dialed will not display for review.

**NOTE** Do not attempt the sequence **[0]**, **[SEND]**. This will place a call to the local operator.

### Turbo Dial

Press and hold for one second any one of the digit buttons **[2]** through **[9]**.

The digit buttons **[2]** through **[9]** (**[1]** is reserved for Emergency Dialing) provide an advanced form of Super Speed Dialing. Once numbers have been stored in memory locations 2-9, calls can be placed from these locations by pressing the

associated key and holding for approximately one second. There is no need to press **SEND**.

**NOTE** If you wish to use memory location 1 for a non-emergency number, the *EMERGENCY* message may be deactivated through the "Feature Menu" found on page 39. In order to prevent the accidental pressing of these keys, Turbo Dial can be deactivated through the feature menu also.

**NOTE** Turbo Dialing is affected by "Call Restriction" Service Levels 1, 2, and 3. See "Change Service Level" found on page 53. Do not select these service levels if you wish to use Turbo Dialing.

### One-Touch Dialing Keys

Your phone has three special dialing keys, **1**, **11**, **111**, which allow for easy one touch access to numbers stored in these locations.

**To store a number:**

1. Enter phone number to be stored.
2. Press **Store**.
3. Press specific one touch key.
4. The phone is automatically in Alpha Entry Mode. Enter a name or bypass by pressing **Store**.

Phone will confirm storage by displaying **STORE**.

**To place a call:**

1. Press and hold the One-Touch Dial Key **1**, **11**, or **111**.

These keys function like Turbo Dial keys. When you press and hold **1**, **11**, or **111**, a call is

placed to the number stored in that position. To recall the number, press **Recall**, and the specific One-Touch Key. To clear the number, press **Clean**, **Store**, and the specific One-Touch Key. **ALPHA \_** will display. Press **Store**. The unit will display the name and number along with the prompt **CHANGE?**. Press **Store** to clear both name and number. **STORE** will display to indicate that the number has been cleared.

### One-Touch Emergency Dialing

1. Press and hold **EMERGENCY**.

Memory location 01, a Turbo Dial location, may be used for 911 or any other emergency number you may wish to dial even if your phone is locked.

Emergency dialing can be deactivated by using the "Feature Menu" found on page 39. When this feature is deactivated, the number stored in memory location 01 will still be dialed if the phone is unlocked and if you press and hold **EMERGENCY**, but *EMERGENCY* will not display.

**NOTE** Do not select Call Restriction Service Levels 1, 2, or 3 if you wish to use One-Touch Emergency Dialing.

**NOTE** Automatic Redial does not work with emergency dialing while the phone is locked.

### Scratch Pad Memory

The scratch pad permits entry of numbers from the keypad during conversation.

If your party gives you another number to call, simply enter this from the keypad. If you make an error, press **[Clear]** to erase the last digit entered or hold **[Clear]** to erase the entire entry.

Advise your party that they will hear tones as you store the number. To call the scratch pad number at the end of an ongoing conversation, press **[END]**, **[SEND]**.

**NOTE** Refer to "Silent Scratch Pad" on page 45 for details on silencing the tones.

### Tone Dialing (Two-Part Calling)

Your telephone provides the standard Dual Tone Multi-Frequency (DTMF) signals typically used to access alternate long distance services, signal pagers, answering machines, etc. Generally, these services use a two-part procedure: First, a call is placed from the memory or through the keypad to a central telephone number. Then a secondary dial tone is heard, and the additional tone digits are sent.

#### To tone dial from the keypad

Enter the desired number and press **[SEND]**.

Append additional digits using the keypad once prompted. The tones are automatically sent as you press the keys. Do not press **[SEND]** again.

**EXCEPTION** If you have selected silent scratch pad, you must press **[Recall]**, **[Store]** after entering the additional digits.

To tone dial from a memory location, recall from memory the number you wish to send using **[Recall]**, location number. Then press **[SEND]**. To send additional groups of numbers recall the location number and press **[Recall]**, **[SEND]**. Repeat as needed.

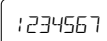
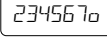
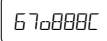




Two-part calling can be automated by a unique feature which permits the programming and pauses between groups of numbers. When recalled or sent, the telephone stops transmitting at the pause and waits for your response (i.e., secondary dial tone).

### Pause Dialing (Memory Linking)

1. Enter the first group of numbers from the keypad or recall them from memory using **[Recall]**.
2. Insert a pause by pressing **[Fon]**, **[SEND]**.  
*INSERT PAUS □* will appear.  
Press **[Store]** and a **□** will display where the pause is inserted.
3. Enter the next group of numbers, or recall them from memory by pressing **[Fon]**, **[Recall]**, two-digit location number.
4. Repeat this sequence for as many groups as you wish up to a maximum of 32 digits. (Each pause occupies a digit.)

**EXAMPLE** To construct a number sequence which you might use to inquire about your bank balance, follow this example. The entry sequence required by the bank is to call the access number, wait for the tone, enter your ID number followed by **[#]**, wait for the tone, then enter your account number followed by **[#]**.

The bank's telephone number is 123-4567. Your ID number is 888. Your account number is 22.

<b>Instruction and Key Sequence</b>	<b>Display</b>
<b>1</b> Enter the phone number of the bank — <b>1</b> , <b>2</b> , <b>3</b> , <b>4</b> , <b>5</b> , <b>6</b> , <b>7</b> or recall it from memory location xx — <b>Recall</b> , x, x	
<b>2</b> Create a pause — <b>Fn</b> , <b>SEND</b> , <b>Store</b>	
<b>3</b> Enter the ID number and a pound sign — <b>8</b> , <b>8</b> , <b>8</b> , <b>#</b> or recall it from memory location xx — <b>Fn</b> , <b>Recall</b> , x, x	
<b>4</b> Create another pause — <b>Fn</b> , <b>SEND</b> , <b>Store</b>	
<b>5</b> Enter the account number and a pound sign — <b>2</b> , <b>2</b> , <b>#</b>	
<b>6</b> To store number, press <b>Store</b> and the Memory Location or One Touch Key. Press <b>Store</b> again to bypass Alpha display. The memory location number will be displayed to confirm storage. If you stored the number in a One Touch Dial location, <b>STORE</b> will be displayed to confirm storage.	 

To place a linked call, press **SEND** to transmit the first group of numbers, prior to the first pause. (If your number is stored in a One-Touch Dialing Key or a Turbo Dial location, simply press the key.) After waiting for the system response, press **Recall**, **SEND** to

send the second group of numbers. Continue to press **Recall**, **SEND** until all digit groups are sent.

If the PIN code feature is activated the PIN code will automatically be sent after the first pause by pressing **SEND**.

**NOTE** Do not add the PIN code to the linked sequence. Your phone will automatically insert the PIN code when placing a linked call. Follow the instructions in "PIN Code Activation" on page 46.

### Edit a Memory Location




1. Press **Recall** and the two-digit location number.
2. Press **Recall** again, if name only displays, so that the phone number to be changed is displayed.
3. Edit phone number by pressing **Clear** to back out the digits to be changed. Enter new digits.
4. Press **Store** and the same two-digit location number.  
The display will flash *ALPHA* and then the name you have stored or \_ if no name is stored.
5. Change or add alpha name tag if desired. To edit name, press **Clear** to back out the letters to be changed. Enter new alpha characters. (Enter alphabetic characters as described on page 28.)
6. Press **Store**.

- You will see a Memory Protect message; press  to overwrite.**



Memory location number will display as confirmation.

**NOTE** See "Name Preference" on page 41 for more details on step 2.

## Clear Memory Entries

- Press , , and the two-digit location number to be cleared.
- The phone will display *ALPHA .*. Press  to bypass.







The phone will display *FULL*, flash number in memory, followed by *CHANGE?*.






- Press  to clear.  
or  
Press  to exit without deleting the entry.




Additional features that may be available with your phone but are not accessed through the feature menu, are also described in this section.

## Select/Cancel Menu Features







- Press , .
- Scroll the menu by pressing  or  until the desired feature displays.
- Press  to change the status of the displayed feature between on and off.
- Press  to exit the Feature Menu.

**EXAMPLE** To activate silent keypad, press , , and scroll with  or  until the display shows *KEYPAD TONE ON*. Press  to activate this feature. The display will then show *KEYPAD TONEOFF*.

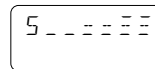
Press  to exit the menu.

## Signal Strength Meter (SSM)

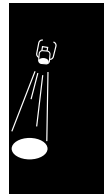
To Disable the SSM from Displaying

- Press , .
- Scroll the menu by pressing  or  until *SIGNAL MTR ON* displays.
- Press  once to disable the SSM, again to re-enable.
- Press  to exit the Feature Menu.

Once the SSM is disabled, *ON* will appear in place of the



See "Signal Strength Meter" on page 22 for more details.



### Feature Status Review

#### To Review Status

1. Press **Func**, **On**, **9**, **Recall**.
2. Press **▲** or **▼** to scroll through activated features.

#### To End Review

Press **END**.

Status review permits you to scroll through your operating settings for your reference.

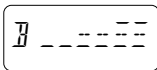
Listed on the page 60 are the status messages you may see if any advanced features are selected or changed from their standard setting.

### Battery Indicator

If your cellular telephone is being used in a carry phone configuration,

Press **Func**, **4** to display a battery indicator.

This allows you to review the battery charge level. The battery indicator is displayed as a bar graph. The B alone represents the lowest voltage with each additional bar representing a stronger charge.



**NOTE** In the carry phone configuration, the display will go blank after six seconds. You may reactivate the display by pressing any key except **Power**.

### Extended Talk Time

The extended talk time feature allows you to conserve battery power when operating in a strong signal area. To enable this feature, refer to "Feature Menu" on page 39.

### Microphone Muting

#### To mute microphone while in a call:

Press **Func**, **6**.

#### To disable mute while in a call:

Press **Func**, **6** again.

This feature allows you to confer privately with others in the car during a call. It will disable the microphone and display *MUTE*. Note that *M* for Mute appears on **6**. The mute feature is canceled if you end your call.

### Name Preference

1. Press **Func**, **1**.
2. Scroll the menu by pressing **▼** or **▲** until *NAME PREFOFF* displays.
3. Press **Clear** once to toggle this feature on, and again to toggle it off.
4. To exit the Feature Menu, press **END**.

The Name Preference feature reverses the display order of memory entries so that the name will be displayed before the number.

### Automatic Answer

1. Press **Fon**, **1<sup>st</sup>**.
2. Scroll the menu by pressing **▼** or **▲** until **AUTO ANSWER OFF** displays.
3. Press **Clear** once to toggle this feature on, and again to toggle it off.
4. To exit the Feature Menu, press **END**.

This feature permits you to answer calls without pressing **SEND**. When your phone receives a call, it will ring twice, then answer the call.

**NOTE** We suggest that you do not select the Automatic Answer and Silent Ringer simultaneously since incoming calls will then be announced only by the flashing **CALL** in the display. Also, this feature may be incompatible with certain enhanced system services, such as no-answer transfer. Consult your Cellular Service Provider.

### Multiple Key Answer

1. Press **Fon**, **1<sup>st</sup>**.
2. Scroll the menu by pressing **▼** or **▲** until **MULTKEY ANSWER OFF** displays.
3. Press **Clear** once to toggle this feature on, and again to toggle it off.
4. To exit the Feature Menu, press **END**.

The Multiple Key Answer feature allows you to answer an incoming call by pressing **SEND** or any digit key **1<sup>st</sup>** through **9<sup>th</sup>**.

### Incoming Call Screening

1. Press **Fon**, **1<sup>st</sup>**.
2. Scroll the menu by pressing **▼** or **▲** until **CALL REV ON** displays.
3. Press **Clear** once to toggle this feature on (**CALL REV OFF**).
4. To exit the Feature Menu, press **END**.

Use this feature if you prefer not to receive incoming calls but wish to be informed of the attempt.

When the phone is on and this feature is selected, incoming calls are signaled by several short bursts of tone, **CALL** in the display, and the black on indicator. The caller will receive the "Not in Service" recording.

As a reminder that incoming call screening is selected, the unit will sound the special tone burst each time it is turned on.

**NOTE** We suggest you do not select Incoming Call Screening and Silent Ringer simultaneously, since the incoming call will not be signalled by a short burst of tone.

### Silent Ringer

1. Press **Fon**, **1<sup>st</sup>**.
2. Scroll the menu by pressing **▼** or **▲** until **RINGER ON** displays.
3. Press **Clear** once to toggle this feature on, (**RINGER OFF**) and again to toggle it off.
4. To exit the Feature Menu, press **END**.





The telephone's ring tones may be silenced where they could prove a distraction, as during a business conference, etc. In this case, incoming calls are announced only by a flashing **CALL** in the display.

**NOTE** We suggest you do not select the Silent Ringer and Automatic Answer simultaneously, since the phone will then answer a call without audible indication.

## Distinctive Ringer

This feature allows you to select one of nine different ringer styles to differentiate when your phone is ringing. When selected, the phone will give you a brief sample of that ringer style.

1. Press **Fon**, **1<sup>st</sup>**.
2. Scroll the menu by pressing **▼** or **▲** until **RINGER STYLE** displays.
3. Press **Clear** once to select this feature.

The selected ringer will sound as an example of this ringer style. The ringer style will display **SELECT 1-9**.

4. Press **1<sup>st</sup>** - **9<sup>th</sup>** to sample the different ringer styles.
5. Press **\*** or **#** to scroll through the ringer styles.

The display will show the number of the selected ringer style.

6. Press **Store** to select the desired ringer style.

The display will show: **RINGER X SET** where the **X** is the number of the ringer style selected.

7. Press **END** to exit the menu.



## Silent Keypad

1. Press **Fon**, **1<sup>st</sup>**.
2. Scroll the menu by pressing **▼** or **▲** until **KEYPAD TONE ON** displays.
3. Press **Clear** once to toggle this feature on, (**KEYPAD TONE OFF**) and again to toggle this feature off.
4. To exit the Feature Menu, press **END**.

When selected, this feature silences the tones used to indicate keypad depressions.

## Silent Scratch Pad

1. Press **Fon**, **1<sup>st</sup>**.
2. Scroll the menu by pressing **▼** or **▲** until **SCRATCH TONE ON** displays.
3. Press **Clear** once to toggle this feature on, and again to toggle it off.
4. To exit the Feature Menu, press **END**.

Use this feature to enter scratch pad numbers during a call without transmitting tones. You will hear the tones, but your called party will not.

**NOTE** Should you wish to transmit DTMF tones (to access answering machines, pagers, automatic menus, etc.) while Silent Scratch Pad is activated, enter the digits and press **Recall**, **SEND**.



## PIN Code Activation

### Activate PIN Code

1. Press **Fn**, **1**.
2. Scroll the menu by pressing **▼** or **▲** until *PIN INACTIV* displays.
3. Press **Clear** once to toggle this feature on, and again to toggle it off.
4. To exit the Feature Menu, press **END**.

### Store PIN Code in Memory Location 07

1. Enter PIN code.
2. Press **Store**.
3. Press **0**, **7**.

### Place a Call With PIN Code Active

1. Enter number to be called, or recall from memory.
2. Press **SEND**. Wait for double tone –“beep, beep.”
3. Press **SEND**. The phone will automatically send the PIN code stored in memory location 07.

Your cellular carrier may require a personal identification number (PIN) when placing outbound calls. This code assures the cellular system that the person placing the call is an authorized user. Ask your cellular service provider if this is required in your system. Only select this feature if your cellular service provider requires it.

This feature will allow you to automatically send your PIN code with all outbound calls. If *INVALED PIN* displays, check to see if you have activated the feature in the menu without storing a PIN

number in memory location 7. The PIN code must be less than seven digits.

If you enter a service area which does not require a PIN code, disable the feature in the feature menu.

## Timers

Call timers provide a useful means of monitoring the air-time spent in conversation. Several of these operate in the background and can be displayed at any time. Another offers beep tones heard only on your side of the conversation.

Each timer begins counting as a cellular channel is assigned, or when the phone rings to signal an incoming call. If an incoming call is not answered, the timers revert to their previous values.

### Individual Call Timer

#### To Display the Time of Your Last Call

Press **Recall**, **#**, **#**.

This timer accumulates the air-time of a call in minutes and seconds.

It automatically resets before a new call is placed and when the phone is turned off.

### Resettable Call Timer

#### To Display

Press **Recall**, **#**, **#**, **#**.

#### To Reset

Press **Fn**, **0**, **7**, **Clear**.



This timer accumulates the air-time in minutes from the point at which it is reset.

This resettable timer is generally utilized to track monthly air-time usage and is set in conjunction with the monthly billing cycle.

**NOTE** *If you have two phone numbers programmed in your phone, each phone number has its own resettable call timer. To view the resettable call timer associated with the other phone number, switch your phone to that number, then use the sequence on the previous page.*

## Cumulative Call Timer

### To Display

Press **[Recall]**, **[#]**, **[#]**, **[#]**, **[#]**.

This is a non-resettable timer which accumulates the phone's total air-time in minutes, starting with the initial factory setting.

**NOTE** *If you have two phone numbers programmed in your phone, each phone number has its own cumulative call timer. To view the cumulative call timer associated with the other phone number, switch your phone to that number, then use the sequence above.*

## Individual Display Timer

1. Press **[Fon]**, **[1<sup>min</sup>]**.
2. Scroll the menu by pressing **[▼]** or **[▲]** until **INDIV TIMR OFF** displays.
3. Press **[Clear]** once to toggle this feature on, and again to toggle it off.

4. To exit the Feature Menu, press **[END]**.

This feature automatically displays the accumulated time in minutes and seconds during and after each call.

## One-Minute Timer

1. Press **[Fon]**, **[1<sup>min</sup>]**.
2. Scroll the menu by pressing **[▼]** or **[▲]** until **ONE MIN TIMROFF** displays.
3. Press **[Clear]** once to toggle this feature on, and again to toggle it off.
4. To exit the Feature Menu, press **[END]**.

This timer provides a tone ten seconds before the end of each minute during calls.

## Security Features

Your telephone offers several forms of security against unauthorized use. These require either your three-digit unlock code, or the six-digit security code. The factory programmed unlock code is 123 and the factory programmed security code is 000000.


## Electronic Lock

### To Lock

1. Press **[Fon]**, and hold **[5<sup>2</sup>]** until **LOCK?** displays.
2. Press **[Store]** to lock. **LOCKED** will display.

### To Unlock

Enter your three-digit unlock code. If you make an error, press **[Clear]** and start again.




The electronic lock prevents use of the telephone by disabling both incoming and outgoing calls. To help remember which key to use, note that *L* for Lock appears on .

If a call is received during this period, the phone will ring, and you must enter the unlock code before the call can be answered.

## Change Unlock Code







1. Press  , .
2. Enter your six-digit security code.
3. Enter the new desired three-digit unlock code.
4. Press  . The new unlock code will display to confirm storage.

## Display Unlock Code

1. Press  , .
2. Enter your six-digit security code.
3. Press  . The phone will display *LOC* and the three-digit unlock code.

**NOTE** Use this procedure if you have forgotten your current three-digit unlock code.

## Automatic Lock








1. Press  , .
2. Scroll the menu by pressing  or  until *AUTO LOCKOFF* displays.
3. Press  once to toggle this feature on, and again to toggle it off.
4. To exit the Feature Menu, press .

This feature automatically locks your phone each time it is turned off.



## Theft Alarm

### To Select (On)

1. Press  , .
2. Scroll the menu by pressing  or  until *THEFT ALARMOFF* displays.
3. Press  once to toggle this feature on, and again to toggle it off.
4. Press  to exit the feature menu. The phone will display *ARMED*.
5. Enter the phone number to be called or recall a number from memory.
6. Turn off the phone by pressing .

### To Cancel (Off)

1. Turn on the ignition.
2. Enter your three-digit unlock code within 30 seconds.

When the theft alarm is selected, and an unauthorized person turns on your phone and does not enter your unlock code within 30 seconds, an alerting call will be placed to the phone number you have stored in this feature. If the phone receives a busy signal, it will repeat the call automatically.

Anyone answering the call will hear alternating high and low pitched tones (siren).

The removal of the control unit will not prevent your mobile telephone from attempting to place the call. However, if the antenna has been removed, the phone will be prevented from successfully completing the call.



**NOTE** *If you inadvertently trip the theft alarm and the alarm call is placed, you can stop the alarm by entering your three-digit unlock code. This feature must be reset in the feature menu each time the phone is disarmed.*

If the PIN code is activated, the theft alarm will not work as the PIN code must be sent manually in order to complete a call.

### **Auxiliary Alert (mobile configurations only)**



**1. Press** ,  **with the unit on, unlocked, and Theft Alarm and Silent Ringer inactive.**

*ALERT* will display.




**2. Turn off the vehicle ignition.**

The Auxiliary Alert feature allows an additional alerting device (horn or lights) to be activated for the first five rings (20 seconds) of an incoming call. This is useful if you intend to be outside of the vehicle and expect a call.

**NOTE** *A call cannot be in progress when you enable Auxiliary Alert. Auto Answer is disabled during Auxiliary Alert.*

When the Auxiliary Alert mode is enabled, the mobile telephone remains on despite the vehicle ignition being turned off. Calls may be placed while in the Auxiliary Alert mode unless the unit has also been locked subsequent to pressing , .



The Auxiliary Alert mode is automatically disabled the next time the ignition is turned from off to on. The Auxiliary Alert mode can also be disabled by pressing  or by pressing ,  again. *ALERT* will turn off when the feature is disabled.

### **Change Service Level**

**1. Press** , .

**2. Enter your six-digit security code.**









**3. Enter the number of the service level you wish to use.**

**4. Press** .

The phone will display *LEVEL* and the number selected.

Your telephone can be set to restrict call placement (as when lending the phone to another person). Using the six-digit security code, you may select one of the levels of restriction shown on the page 54.




<b>Restrictions</b>	<b>Level</b>
No restrictions (Standard setting)	4
<ul style="list-style-type: none"> <li>• Full keypad and directory dialing</li> <li>• No storage in directory locations 1-10 or One Touch Dial locations</li> </ul>	6
<ul style="list-style-type: none"> <li>• Keypad dialing only</li> <li>• No directory or Turbo Dial access</li> </ul>	3
Phone will place calls from all directory locations (Recall,   -   SEND). No keypad dialing. No directory change or storage.	2
Seven-digit (local) dialing only, including directory and message calls (if seven digits or less)	5
Phone will place calls only from directory locations 1-10 (Recall,   -   SEND). If locations 1-10 are cleared, no outgoing calls can be made. No keypad dialing. No directory or One Touch Dial storage.	1

To change the phone to unrestricted operation, use the procedure above and enter service level 4.

## Master Reset

**CAUTION** *Once begun, this procedure cannot be canceled or reversed.*

1. Press , .
2. Enter your six-digit security code twice.
3. Press , .

This feature allows you to reset most or all the user selectable options to their standard settings. Master reset will perform the functions listed below.

<b>Master Reset will Perform these Functions</b>	<b>Pg.</b>
Cancel Automatic Hands Free	21
Cancel Automatic Answer	42
Cancel Individual Display Timer	48
Cancel Automatic Lock	50
Cancel Incoming Call Screening	43
Cancel Multiple Key Answer	42
Cancel Name Preference Feature	41
Cancel One-Minute Timer	49
Cancel Silent Scratch Pad	45
Cancel Theft Alarm	51
Reinstate Emergency Message	33
Reinstate Keypad Tones	45
Reinstate Signal Strength Meter	39
Reinstate Ringer Tones	43
Reinstate Turbo Dialing	31
Reset Service Level to Level #4 (Standard setting)	53
Return System Type to Standard	58
Cancel PIN Activation	46

### Master Clear

**CAUTION** *Master Clear performs all the functions of Master Reset, in addition to erasing all names and numbers stored in memory, and clearing the Resettable Call Timer. Once begun, this procedure cannot be canceled or reversed.*

1. Press **Fcn**, **0**.
2. Enter your six-digit security code twice.
3. Press **9**, **Store**.

*BUSY* may display.

4. Wait for this to clear before using the phone. It may take several minutes, depending on how full your memory is. Do not turn the phone off during this operation.



### The Cellular System

There are generally two types of cellular systems serving any metropolitan area. One of these will most likely be operated by the telephone company that provides telephone service to your community, generally referred to as a *wireline carrier*. The other cellular service provider is a radio common carrier, referred to as a *non-wireline carrier*.

Your Cellular Service Operator will provide information concerning specific features, procedures, and coverage in your particular area.

### Service Area

The area within which the telephone operates is defined by your cellular service provider. Since this is a radio system, no exact boundaries (as on a map) can be drawn. The black **No Svc** (No Service) lights if you are beyond range of a service area. There may be locations within your area, such as tunnels and underground parking facilities, where the phone may act as if it were beyond range.

### Weak Signal Alert

If you are called while in a location the system determines is inadequate for high quality service, you may hear a series of beeps to inform you of the call attempt. The caller will receive the recorded "not in service" message, *CALL* will display, and the black on indicator will flash quickly. If this occurs, you must press **Clear** before the phone will operate. Most systems do not impose air-time charges for such call attempts.



## Switchhook and Enhanced System Services

Press **END**.

During a call, pressing **END** performs a switchhook function used to access enhanced Cellular System features, such as call waiting and conference calls. For the functioning of these features with **END**, consult your Cellular Service Provider.

## Roaming

The term *Roaming* applies to the use of cellular telephones within systems other than those designated as their Home system. **Roam** lights whenever the phone comes within range of a visited system. As your phone begins to roam, it seeks service according to the conditions you have selected. See "System Type Selection" on page 60.

Steady illumination of *Roam* signals that your phone is accessing a home type system, while flashing indicates the phone is attempting connection through a non-home type system.

Contact your system operator, or that of the visited system, for information on dialing and billing procedures.

## Selectable System Registration

To Review Current Setting

1. Press **Recall**, **\***. The display will show the current active system choice.
2. Press **END** to exit without changing selection.

To Select

1. Press **Recall**, **\***. The display will show the current active system choice.
2. Repeatedly press **\*** to review the system type modes. (Press **END** to exit without changing selections.)
3. Press **Scroll** to activate the displayed selection.
4. Press **END** to exit.

## System Type Selection

Your telephone seeks cellular service according to the mode you have selected. If you have selected two-system operation, the phone seeks cellular service according to the system type mode selected for each phone number.

Constant flashing of **Roam**, or a steadily lit **No Svc** while within your home service area may indicate an unintentional choice has been made. If this occurs, re-enter system type selection to see if the unit is operating in standard mode, or if an alternate selection has been made.










<b>System Type Selection</b>	<b>Display</b>
<b>C Scan</b> Appears if programmed by your carrier. This is the default setting.	CSCAN
<b>Standard Mode</b> Your phone first seeks a home type system, then a non-home type. If home system is non-wireline (type <b>A</b> ) If home system is wireline (type <b>B</b> )	STDA STDBA
<b>Invert Preference Mode</b> Your phone first seeks a non-home type system, then home type. (Select this mode if in a fringe area of your home system or in certain roaming situations.)  If home system is <i>non-wireline</i> (type <b>A</b> ) Fast flashing <i>Roam</i> = call on <b>B</b> system Slow flashing <i>Roam</i> = call on home type system Slow flashing <i>In Use</i> = call on home system  If home system is <i>wireline</i> (type <b>B</b> ) Fast flashing <i>Roam</i> = call on <b>A</b> system Slow flashing <i>Roam</i> = call on home type system Slow flashing <i>In Use</i> = call on home system	SCANBA  SCANBA
<b>Home Only Mode</b> Phone will not operate outside its home system.	HOME
<b>Scan A Mode</b> Phone will operate only within non-wireline ( <b>A</b> ) systems.	SCAN A
<b>Scan B Mode</b> will operate only within wireline ( <b>B</b> ) systems.	SCAN B
<b>Preferred SID's Mode</b> Unit will operate only within specifically identified systems. This choice requires entry of up to 15 System ID numbers for those systems over which you wish to operate. The SID digits are entered as obtained from your Cellular Service Operator.	PREF SID5

## C Scan








Your Motorola cellular telephone has been equipped with a special level of A/B System Selection called *C Scan*. This feature will limit the systems on which you can inadvertently operate and thus minimize billing problems.

If you review the roam characteristics of your phone with the ,  sequence, *C SCAN* will be the first choice which appears in the display if you have at *least one negative System I.D. entered*. Repeatedly pressing  or  will scroll through the other five System Selection choices as shown above. You may press  to select an alternate choice when it appears in the display. Your choice will remain in effect until you turn off your telephone. On every power-up cycle, the telephone will automatically revert back to C Scan mode of operation.

When the **No Svc** indicator blinks, it indicates either that you are in an area that cannot give you service due to the C Scan mode or an area where no cellular service is available. In this case, you may select another level of A/B "System Selection" as described on page 60.

## Preferred SID's

To enter Preferred SID's:

1. Press , .
2. Press  or  to scroll to *PREF SID'S*
3. Press  to enter first 5 digit System ID (40000 will display as the default).
4. Press  to enter each SID until all desired SID's are entered (up to 15).
5. Press  to store your entries.

## Troubleshooting

1. **Is the unit locked?**  
See "Electronic Lock", page 49.
2. **Is the No Svc (No Service) indicator lit?**  
See "Status Indicators", page 16.
3. **Is your Roam Indicator lit?**  
Constant flashing of the *Roam* indicator while in your home service area may indicate that an incompatible system type has been selected. See "Roaming", page 58.
4. **Are you having difficulty accessing devices such as answering machines which require longer access tones?**  
Check to see if Silent Scratchpad is enabled. If so, disable through the Feature Menu, as described in "Select/Cancel Menu Features" on page 39, and try the call again.



## Quick Reference Feature Guide

### Basic Operation

- Turn It On **Power**.
- Lock **Fcn**, **5**.
- Unlock Three-digit unlock code.
- Turn It Off **Power**.
- Place a Call Enter number, **SEND**.
- Receive a Call **SEND**, or lift handset to ear.
- End Call **END**, or return handset to its mount.

### Volume Control

- Earpiece Lift handset, **▲** or **▼**.
- Speaker With handset mounted, press and hold **▲** or **▼**.
- Ringer **Fcn**, then **▲** or **▼**.

### Store to Memory

- Number and Name Phone number, **Store**, two-digit location, alpha characters, **Store**. To store in next available location, **Store**, **\***.

### Memory Recall

- By Location **Recall**, two-digit location. **SEND** to place call.
- Super Speed Dialing Memory location, **SEND**.
- Turbo Dialing Press and hold memory location (**1**-**9**) for one second.




### Feature Menu

- Enter Menu **Fcn**, **1**, **▼** or **▲** to scroll.
- Select Feature **Clear**.
- Cancel Feature **Clear**.
- Exit **END**.

### Additional Features

- Status Review **Fcn**, **0**, **9**, **Recall**, **▼** or **▲** to scroll.
- Last Number Recall **Recall**, **SEND**.
- Display Own Number **Recall**, **#**.
- Activate Other Number **Recall**, **#**, **Store**.
- Mute Microphone **Fcn**, **6**.
- Scratch Pad Enter numbers during call. **END** to terminate call and **SEND** to place call to scratch pad number.

**Message Glossary**

'	(Apostrophe) Scrolling activated
A	 displayed as "A"
A1	Two-System Operation (Active system is non-wireline, using phone number 1.)
A2	Two-System Operation (Active system is non-wireline, using phone number 2.)
ALPHA	Alpha Entry is selected.
ARME	Theft Alarm selected.
AUTO ANSR ON	Automatic Answer is active.
AUTO ANSROFF	Automatic Answer is disabled.
AUTO LOCK ON	Automatic Lock is active.
AUTO LOCKOFF	Automatic Lock is disabled.
 _ _ _ _ _	Battery Voltage Meter (Number of bars indicates relative level of voltage.)
B1	Two System Operation (Active system is wireline, using phone number 1.)
B2	Two System Operation (Active system is wireline, using phone number 2.)
BUSY	Master Clear functioning
C	Precedes Cumulative Timer display (also used to display  )
C SCAN	System type selected

CALL	Shows incoming call (also used to indicate call in absence)
CHANGE?	Used when memory protect is activated to prevent accidental overwriting of a memory location
CLEAR?	Memory Protect is activated to prevent accidental overwriting of a memory location.
EMERGENCY	Emergency Dialing is initiated.
EMERGENCY CALL ON	Emergency Call is active.
EMERGENCY CALLOFF	Emergency Call is disabled.
EMPTY	Name Directory is empty.
EXTEND TALK ON	Extended Talk Time is active.
EXTEND TALKOFF	Extended Talk Time is disabled.
FULL	Indicates all directory locations are full, requested block is unavailable, or location has a number already stored in it
HF AUTO NOSWITCH	Automatic Hands Free is selected.
HF AUTO SWITCH	Automatic Hands/free is disabled.
HF--	Enhanced Simplex Hands Free is selected.
HOME	System Type Selection – Home Mode
INDIV TIMR ON	Individual Timer is active.
INDIV TIMROFF	Individual Timer is disabled.

KEYPAD TONE ON	Keypad Tones are active.
KEYPAD TONEOFF	Keypad Tones are disabled.
LEVEL 1	Service level selected
LEVEL 2	Service level selected
LEVEL 3	Service level selected
LEVEL 4	Service level selected
LEVEL 5	Service level selected
LEVEL 6	Service level selected
LOC	Precedes unlock code when displayed
LOCKED	Unit is locked.
MULTKEY ANSR ON	Multiple Key Answer is active.
MULTKEY ANSROFF	Multiple Key Answer is disabled.
MUTE	Microphone is muted.
NAME PREF ON	Name Preference is activated.
NAME PREFOFF	Name Preference is disabled.
ON	Telephone is on.
ONE MIN TIMR ON	One Minute Timer is active.
ONE MIN TIMROFF	One Minute Timer is disabled.
PIN ACTIVE	PIN is active.
PIN INACTIV	PIN is disabled.
R	Precedes display of Resettable Timer
REDIAL	Automatic Redial is selected.

REMIND MSG ON	Remind Message is active.
REMIND MSGOFF	Remind Message is disabled.
RINGER OFF	Ring Alert is canceled.
RINGER STYLE	Ringer Style is selected.
S_ _ _ _ _	Signal Strength Meter (SSM) (Number of bars indicates relative signal strength.)
SCAN A	System Type Selection (scan non-wireline "A" only)
SCAN AB	System Type Selection (scan "A" type first, then "B")
SCAN B	System Type Selection (scan wireline "B" only)
SCAN BA	System Type Selection (scan "B" type first, then "A")
SIGNAL MTR ON	Signal Strength Meter is active.
SIGNAL MTROFF	Signal Strength Meter is disabled.
STD	All user features set to standard
STD AB	System Type Selection (non-wireline standard mode)
STD BA	System Type Selection (wireline standard mode)
SYSTEM BUSY	Cellular system is busy.
SCRPAD TONE ON	Scratch Pad Tones are active.
SCRPAD TONEOFF	Scratch Pad Tones are disabled.

*THEFT  
ALARM ON*

Theft Alarm is active.

*THEFT  
ALARMOFF*

Theft Alarm is disabled.

*TIMER*

Automatic Display Timer is selected.

*TURBO  
DIAL ON*

Turbo Dialing is activated.

*TURBO  
DIALOFF*

Turbo Dialing is disabled.

*V \_ \_ \_ \_ \_*

Volume Meter (Number of bars indicates relative volume level.)



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**Notes**



## Notes



**This product may be powered by a rechargeable battery which must be recycled or disposed of properly.**

- Refer to the battery label for battery type.
- Recycling facilities may not be available in all areas.
- For additional information regarding disposal or recycling, call 1-800-331-6456 (in U.S.A.).



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