
Motorola

iDEN[®]

Digital Multi-Service Data-Capable Phone

i90c Phone User's Guide



NNTN4506A

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IMPORTANT!

Read “Safety and General Information” on page 177 before using your *i90c* phone.

DECLARATION OF CONFORMITY

Per FCC CFR 47 Part 2 Section 2.1077(a)



Responsible party name: Motorola Inc.
Address: 8000 West Sunrise Boulevard,
Plantation, FL 33322 USA
Phone number: 1 (800) 453-0920

Hereby declares that the product:

Product name: i90c
Model Number: H41UAH6RR1AN

Conforms to the following regulation:

FCC Part 15, subpart B
Class B Computer Peripheral

Date: June 28, 2002

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Introduction

congratulations on purchasing your Motorola iDEN i90c multi-service, data-capable, digital, portable phone. Your i90c phone offers:

- **Voice Activated Dialing** — Your i90c phone offers state-of-the-art Voice Activated Dialing.
- **Speakerphone** — You can enjoy hands-free communication at the touch of a button. Speakerphone is especially great for conference calls.
- **Phonebook** — Your consolidated Phonebook holds up to 250 entries and allows you to store multiple contact numbers for each person, offering you various ways to communicate with your business and personal contacts.
- **SIM Card** — Your phone's SIM card holds all entries stored in your Phonebook. In addition, you have a PIN (Personal Identification Number) to keep your information safe and secure.
- **Datebook** — Schedule and keep track of appointments using your phone's Datebook feature.
- **Messages** — The Message Center allows you to manage and access your Voicemail, Text Messages and Net Alert all from the same inbox.
- **Private and Group Calls** — You can use your phone as a two-way radio to communicate directly with business and personal contacts in your iDEN service area.
- **Fax and Data Transfer** — for circuit data faxes and file transfers. See "Using Your Phone as a Modem" on page 90.
- **Voice Records** — Record notes to yourself or the incoming portion of phone calls.
- **J2ME™** — With the Java™ applications feature, you can choose from the many Java programs, download Java applications directly from the Internet, or try one of the pre-loaded applications.
- **Closed-Cover Features** — The external display screen and control buttons enable you to use many of your i90c phone's features without opening the cover.
- **Customization** — Use the Settings, Styles, and Shortcuts features to customize your i90c phone to meet your individual needs.

For more information on these and other features of the i90c phone, review this User's Guide. There is a Table of Contents in the front of the guide and an Index in the back of the guide to assist you in finding the specific information you want.

NOTE: Some features of your *i90c* phone are available only in the iDEN service area, and are indicated as such in this guide.

NOTE: This guide describes the features of the *i90c* phone as they were set up by Motorola. However, your carrier or your organization may have changed or added features. For more information, check with your carrier or your organization.

Driving Safety Tips

“Safety is your most important call!”

Your Motorola wireless telephone gives you the powerful ability to communicate by voice — almost anywhere, anytime, wherever wireless phone service is available and safe conditions allow. But an important responsibility accompanies the benefits of wireless phones, one that every user must uphold.

When driving a car, driving is your first responsibility. If you find it necessary to use your wireless phone while behind the wheel of a car, practice good common sense and remember the following tips:

1. Get to know your Motorola wireless phone and its features such as speed dial and redial. If available, these features help you to place your call without taking your attention off the road.
2. When available, use a hands-free device. If possible, add an additional layer of convenience to your wireless phone with one of the many Motorola Original hands-free accessories available today.
3. Position your wireless phone within easy reach. Be able to access your wireless phone without removing your eyes from the road. If you receive an incoming call at an inconvenient time, if possible, let your voice mail answer it for you.
4. Let the person you are speaking with know you are driving; if necessary, suspend the call in heavy traffic or hazardous weather conditions. Rain, sleet, snow, ice, and even heavy traffic can be hazardous.
5. If you receive an incoming call at an inconvenient time do not take notes or look up phone numbers while driving. Jotting down a “to do” list or going through your address book takes attention away from your primary responsibility — driving safely.
6. Dial sensibly and assess the traffic; if possible, place calls when you are not moving or before pulling into traffic. Try to plan calls when your car will be stationary. If you need to make a call while moving, dial only a few numbers, check the road and your mirrors, then continue.
7. Do not engage in stressful or emotional conversations that may be distracting. Make people you are talking with aware you are driving and suspend conversations which have the potential to divert your attention away from the road.
8. Use your wireless phone to call for help. Dial 9-1-1 or other local emergency number in the case of fire, traffic accident or medical emergencies.¹

9. Use your wireless phone to help others in emergencies. If you see an auto accident, crime in progress or other serious emergency where lives are in danger, call 9-1-1 or other local emergency number, as you would want others to do for you.
10. Call roadside assistance or a special non-emergency wireless assistance number when necessary. If you see a broken-down vehicle posing no serious hazard, a broken traffic signal, a minor traffic accident where no one appears injured, or a vehicle you know to be stolen, call roadside assistance or other special non-emergency wireless number.¹

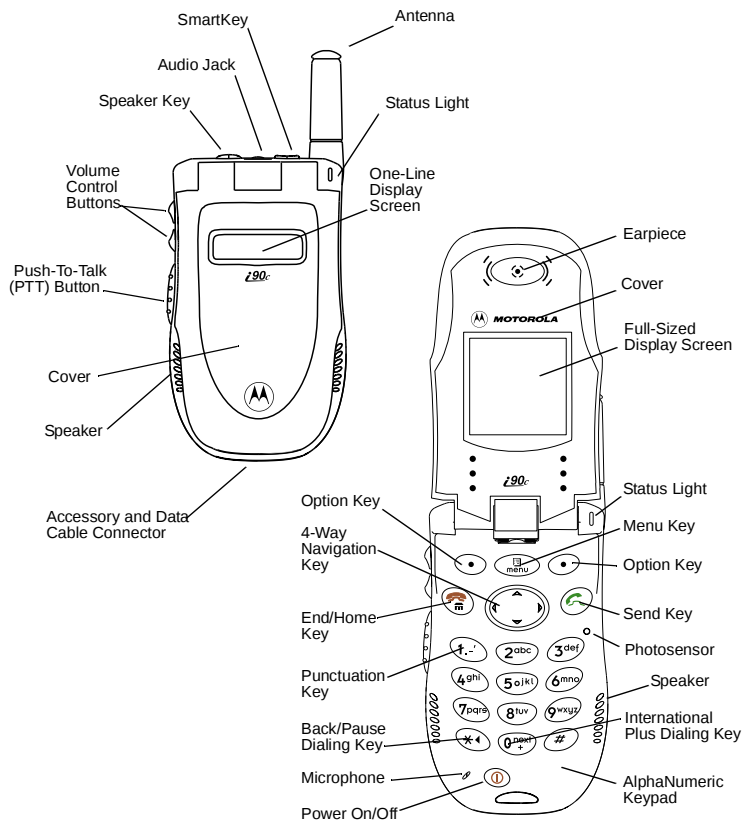
1. Wherever wireless phone service is available.

Getting Started

This section includes:

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i90c Phone Features



Battery

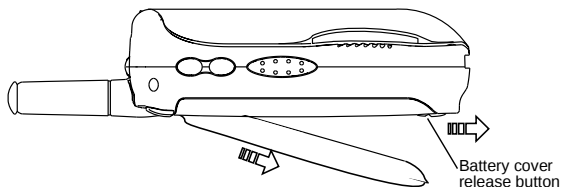
Your i90c phone comes with a Lithium Ion battery and charger. After attaching the battery, you must charge it before you use it for the first time. See “Charging Lithium Ion Batteries” on page 167 for the charging times for your phone’s battery. The first time you charge your phone’s battery, charge for 30 minutes more than the time shown on page 167. After the initial charging, the battery can be charged in the time shown on page 167.

Remove the battery from the protective plastic safety tray provided in the original packaging. When the battery is not attached to the phone, store it in the original tray.

NOTE: Use only the batteries approved for this product.

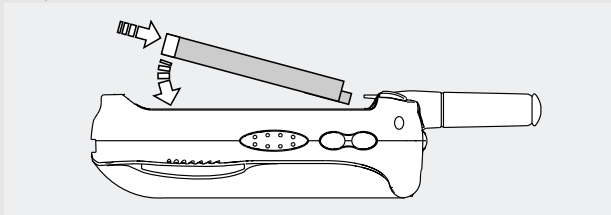
Attaching the Battery

- 1 Slide the battery cover release button away from the battery cover and remove the battery cover from the back of the phone.



USER TIP: Holding the battery cover downward allows it to fall easily from the back of the phone without being pulled.

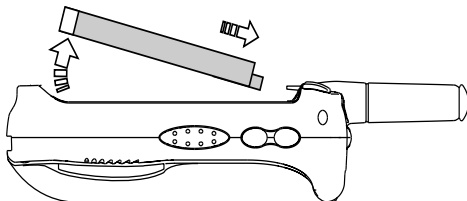
- 2 Insert the top of the battery into the battery area. Press the bottom of the battery to secure it.



- 3 Replace the battery cover and press it gently until you hear a click.

Detaching the Battery

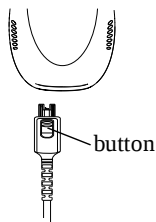
- 1 Ensure that the phone is powered off before attempting to detach the battery.
- 2 Slide the battery cover release button away from the battery cover and remove the battery cover from the back of the phone.
- 3 Remove the battery by pushing the battery toward the antenna and lifting it out of the phone.



Charging the Battery

- 1 With your phone's display screen facing up, plug the charger's accessory connector into the left side of the accessory connector on the bottom of the phone.

NOTE: Press the button of the charger's accessory connector before inserting the connector into the bottom of the phone.



- 2 If the charger has folding electrical prongs, flip open the prongs.
- 3 Plug the charger into an electrical outlet.

Battery Charging Status

The battery strength indicator icon found on your phone's display screen shows the amount of power in the battery.

When Using Phone

Icon Display				
Battery Strength	Low Battery	11% to 40%	41% to 70%	Fully Charged

A short, chirp-like sound indicates a low battery. The icon flashes to indicate that you have approximately five minutes of talk time remaining.

When Charging Battery

Icon Display	 1 flashing bar	 1 flashing bar, 1 continuous bar	 1 flashing bar, 2 continuous bars	 3 continuous bars
Battery Strength	Low Battery	31% to 60%	61% to 90%	Fully Charged

Turning Your i90c Phone On/Off

To power the phone on:

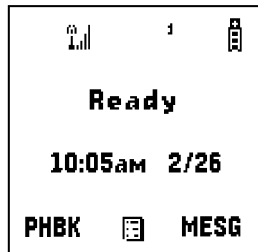
1	Open the phone cover.
2	For optimal signal strength, extend the antenna.
3	Press and hold  on the keypad until the status light glows red and a tone briefly sounds.

- 4** When the **Enter SIM PIN Code** screen displays, enter your SIM PIN. (For more information see “SIM Card Personal Identification Number (PIN)” on page 18.)

NOTE: The default SIM card PIN is 0000. It is recommended that you change your PIN to prevent fraudulent use of the SIM card (see “Changing the PIN” on page 20).

- 5** Press  under OK.

As your phone connects to the network, you will see a welcome message and a connecting message. When the **Ready** screen appears on the display, you are ready to use your i90c phone!



To power the phone off:

- 1** Press and hold  on the keypad until you see the message **Powering Off**.
- 2** Close the phone cover.
- 3** Push down the antenna.

Closed-Cover Features

You can use a variety of the i90c phone's features and functions while the phone cover is closed.

With the cover closed, you can:

- answer calls
- conduct calls with speakerphone on
- end calls
- view last 20 calls
- place a call to the number of your last 20 calls

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- place calls to numbers in your Phonebook using voice-activated dialing
- send incoming calls to voice mail
- receive and dismiss call alerts, message notifications, Datebook event reminders, and notification of missed calls
- adjust volume of speaker, ringer, and call alert notification
- transfer data to and from your phone

Enabling Security

To utilize browser functionality from your service provider, you must enable security the first time you power on your phone or within 20 days of first activation of your phone.

- 1 When you power on your phone for the first time, after the **Ready** screen appears, you will be prompted to select OK to update your browser info.

NOTE: If you press  under LATER, you will be prompted to enable security each time you power on your phone until you press  under OK. It is recommended that you do not choose LATER.



- 2 Press  under OK.

- 3 You are prompted to enable security. Press  under YES. A series of screens display. If you subscribe to your service provider plan, your home page displays.

- 4 Press  to return to the **Ready** screen.

Receiving Over-the-Air Programming

If you have been set up to receive over-the-air programming (OARSS), you will receive your Private ID and Talkgroup lists for Private Call use, your Personal Telephone Number via a Net Alert message.

In order to receive your programming, you must enable security (“Enabling Security” on page 17). Within 24 hours of enabling security, you will receive a Net Alert message containing your lists.

To accept your phone programming:

1	You will receive a Net Alert with the message New Browser Message - Receive Programming Info.
2	Press  under GOTO.
3	You are prompted to accept changes to your phone's lists. Press  under OK.
4	A confirmation screen displays. Press  under OK.
5	You are prompted again to accept changes to your phone's lists. Press  under OK.
6	A confirmation screen displays. Press  under OK.
7	Press  to return to the idle screen.

SIM Card

Your phone comes with a built-in level of security protection through the use of the SIM (Subscriber Identity Module) card. The SIM card stores all your Phonebook information. Since this information is stored on the SIM card, not in your phone itself, you can remove the information by removing the SIM card.

The SIM card is located in the SIM card holder on the back of the phone, underneath the battery. You can verify that the SIM card is in place by removing the battery and viewing the SIM card through the SIM card cover.

See “Inserting/Removing the SIM Card” on page 23 for information on locating the SIM card. If there is no SIM card in your phone, notify your sales representative.

NOTE: Except for making emergency calls, your phone will not function without the SIM card.

SIM Card Personal Identification Number (PIN)

To prevent unauthorized use of your phone, your SIM card is protected by a PIN. Each time the phone is powered on, you must enter your PIN. You can change or disable your PIN if desired.

NOTE: Disabling your PIN enables anyone to use your phone. If you disable your PIN, you must still keep the SIM card in the phone to make calls.

Entering the PIN

Depending on your service provider, your phone may or may not require you to enter a SIM PIN when you first use your phone.

If your phone is set to require you to enter a PIN, your default PIN is 0000. It is recommended that you change your PIN to prevent fraudulent use of the SIM card (see “Changing the PIN” on page 20).



IMPORTANT:

Incorrectly entering your PIN three times causes the SIM card to be blocked. To unblock your SIM card, you must contact your service provider. For more information, see “Unblocking the PIN” on page 21

- 1 From the **Enter SIM PIN Code** screen, enter your 4- to 8-digit PIN. An asterisk appears for each character entered.

NOTE: Other than emergency dialing, you will be unable to use any of the phone functions, including receiving phone calls, until you enter the PIN.

- 2 Press  under OK.

If you enter an incorrect PIN, the message **SIM PIN incorrect: Try again** appears on your phone’s screen. After three consecutive incorrect attempts, the SIM card is blocked. Once blocked the phone does not allow you to enter your PIN again, even after powering the phone off and back on. If this happens, see “Unblocking the PIN” on page 21.

Changing the PIN

- 1 From the **Ready** screen, press  and then press  to scroll to **Settings**.



- 2 Press  under **SELECT**. The **Settings** screen displays.

- 3 Press  to scroll to **Security**. Press  under **SELECT** to access the **Security** screen.



- 4 At the **Security** screen, press  to scroll to **New Passwords**. Press  under **SELECT** to access the **New Passwords** screen.

- 5 At the **New Passwords** screen, press  to scroll to **SIM PIN** and press  under **SELECT**.

- 6 At the **Enter Old SIM PIN Code** screen, enter the current SIM PIN and press  under **OK**.

- 7 At the **Enter New SIM PIN Code** screen, enter the new 4- to 8-digit SIM PIN and press  under **OK**.

- 8 At the **Re-enter New SIM PIN Code** screen, re-enter the new SIM PIN to confirm, and press  under **OK**.

Unlocking the PIN

If you forget your PIN and unsuccessfully enter it three times, access to your phone will be blocked.

NOTE: Before you begin, obtain the PIN Unlocking Key (PUK) code from your service provider, then read and understand the PIN unblocking sequence. In entering the key press sequence, each key press must occur within 5 seconds of the prior key press.

IMPORTANT:	If you unsuccessfully enter the PUK code ten times, the SIM card is permanently blocked and must be replaced. If this happens, all data will be lost. You will get a message to contact your service provider. If the SIM card is blocked, the /90c phone only allows outgoing Emergency calls.
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To unblock the PIN:

1	Press *+ (0 Next) 5+ jk) ↵.
2	Enter the PUK code.
3	Press ↵.
4	Enter a new 4- to 8-digit SIM PIN and press ↵.
5	Re-enter your SIM PIN and press ↵. If you entered the codes properly, the SIM Unlocked screen displays.

Disabling/Enabling the PIN Requirement

When the PIN requirement is enabled, you are prompted to enter your PIN each time you turn on your phone. Until a valid PIN is entered, you can use the phone only to make emergency calls.

After the PIN is accepted, the phone registers on the network and the **Ready** screen displays.

When the PIN requirement is disabled, the phone can be used without entering a PIN.



IMPORTANT:

If you disable the PIN requirement, you remove protection of personal data on your SIM card. Anyone can then use your phone and access your personal data.

- 1 From the **Ready** screen, press  and then press  to scroll to **Settings**.



- 2 Press  under **SELECT**. The **Settings** screen displays.

- 3 Press  to scroll to **Security**. Press  under **SELECT** to access the **Security** screen.



- 4 At the **Security** screen, press  to scroll to **SIM PIN**. Press  under **SELECT** to access the **SIM PIN** screen.
- 5 Press  to scroll to **On** or **Off**. **On** enables the SIM PIN requirement; **Off** disables the SIM PIN requirement. Press  under **SELECT**.
- 6 At the **Verify SIM PIN Code** screen, enter the current SIM PIN and press  under **OK**.

Inserting/Removing the SIM Card

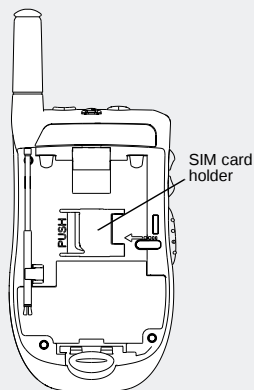
IMPORTANT:	If you remove your SIM card and insert another SIM card into your phone, the following information is erased when you use the phone with the new SIM card: • Datebook events • Recent Calls list • Voice Records • voice names for Phonebook entries and shortcuts • call forwarding settings • call filtering settings in Styles • Net Alerts • information stored in Memo
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IMPORTANT:	Do not touch the gold-colored areas of the SIM card. To avoid loss or damage, do not remove your SIM card from your phone unless absolutely necessary.
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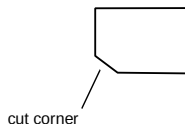
Inserting SIM Card

- 1 With the phone powered off, remove the battery cover and battery. See “Detaching the Battery” on page 14.

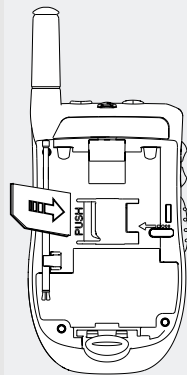
- 2 With the antenna facing away from you and the back of the phone exposed and facing up, locate the SIM card holder.



- 3 Hold the SIM card with the gold contact side facing down and the cut corner in the lower left. *Do not touch the gold-colored areas of the SIM card.*



- 4 Carefully slide the SIM card to the right and into the phone, until it lies flat in the SIM card holder.

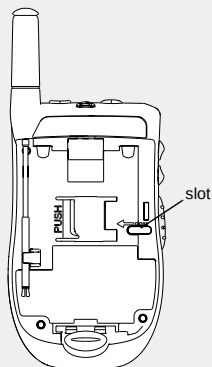


Removing SIM Card

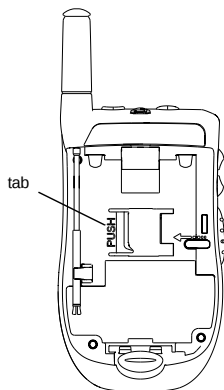
NOTE: To remove your SIM card, you will need a ballpoint pen.

- 1 With the phone powered off, remove the battery cover and battery. See “Detaching the Battery” on page 14.

- 2 With the antenna pointing away from you and the back of the phone exposed and facing up, insert the tip of a ballpoint pen into the slot to the right of the SIM card along the right edge of the SIM card.



- 3 Gently press the tab to the left of the SIM card. Hold this tab down.



- 4 While holding the tab down, slide the SIM card to the left by moving the ballpoint pen to the left within the slot.

- 5 When the ballpoint pen has moved the SIM card to the left as far as possible, *very carefully* lift the SIM card out of the phone. *Do not touch the gold-colored areas of the SIM card.*

NOTE: Protect the SIM card as you would any delicate object. When the SIM card is not in the phone, you should store it in something protective, such as a mailing envelope.

Keypad Lock

The i90c phone includes a Keypad Lock feature that enables you to quickly lock the phone's keys and buttons to avoid inadvertently pressing them.

Once Keypad Lock is activated, you can only perform the following tasks:

- Turn your phone on and off
- Unlock the keypad
- Receive incoming calls, messages, and alerts.

NOTE: You cannot place emergency calls using the keypad while Keypad Lock is activated.

To lock the phone's keypad:

Press  .

When you receive an incoming call, message or alert, Keypad Lock is temporarily disabled. You can respond to the incoming call, message, or alert.

When you have finished responding to the incoming call, message, or alert, press  (if the phone cover is open) or  (if the phone cover is closed) until you return to the idle screen. Once you return to the idle screen, Keypad Lock will automatically reactivate.

To unlock the phones keypad:

Press  .

Status of Your i90c Phone

Your i90c phone has a status light on the top right side of the phone, near the cover hinge. The status light indicates the status of your connection.

Status Light Indicator	i90c Phone Status
Solid Red	Signing on to the network. Please wait.
Flashing Red	No service or out of coverage area.
Flashing Green	In service/Ready to use.
Solid Green	In use.

My Information

You can select **My Info** from the main menu to display or edit the following:

- Name — enter your name in this field.
- Private ID — your Private ID is displayed in this field. Your Private ID is the number that others use to contact you using Private calls.
- Phone Numbers of Lines 1 and 2 — your phone's numbers are displayed in these fields. You can edit the phone numbers displayed on the **My Information** screen, but this does not change your phone numbers.
- Carrier IP — This field displays your phone's carrier assigned IP address.
- IP Addresses — these fields display the IP addresses you use to access the Internet with your phone.
- Circuit Data Number (Ckt) — your circuit data number is in this field.

Viewing/Editing My Information

1	From the Ready screen, press  .
2	Press  to scroll to My Info . Press  under SELECT. The My Information screen displays.
3	Use  to scroll through the fields.
4	To edit the displayed information, press  under CHANGE. Edit information as desired, and press  under OK to save the changes. To return to the Ready screen, press  under EXIT.

Using T9 Text Input

Your i90c phone has embedded software, called T9[®] Text Input, that makes typing on a phone keypad much like typing on a computer keyboard: it eliminates the traditional “multi-tap” method of text entry. As you type, you press only one key per letter. T9 Text Input matches your keystrokes to words in its linguistic database of approximately 60,000 words and proper names. You may also store additional words you frequently use in your own user database, which is incorporated into the T9 database.

T9 Text Input is available when you are typing information into your phone (for example, Phonebook or Datebook).

T9 Text Input Entry Modes

Four text entry modes are available in T9 Text Input: Alpha, Word, Symbols, and Numeric. When you are using T9 Text Input, an icon in the top right corner of your phone's display screen (next to the battery strength indicator icon) indicates the T9 Text Input entry mode you are using:

Icon	T9 Entry Mode Name	Used For...
	Alpha	Standard "multi-tap" keypad text entry.
	Word	Entering words and punctuation with one key-press per character.
	Symbols	Entering punctuation and symbols such as "@" or "?".
	Numeric	Entering keypad numbers.

You can select your text entry mode from a menu available whenever the phone is displaying a screen that requires you to enter text (for example, the **Name** screen or **Title** screen).

To choose a text entry mode:

- 1 From any screen that requires text input, press  to access the **Entry Method** menu.

A check mark appears next to the current text entry mode. When you access a Phonebook or Datebook screen that requires text input, the default text entry mode is Alpha.

- 2 Press  to scroll to the T9 text entry mode you want to use.

- 3 Press  under SELECT.

The phone returns to the text entry screen. The text entry mode you selected is now active.

Using Alpha Mode

To enter text while in Alpha text entry mode to enter letters, numbers, and symbols:

- Press any button on the alphanumeric keypad to enter the letters, numbers, and symbols on that key.
- Type a letter then press  to activate Caps Lock or type a letter then press  to deactivate Caps Lock.
- Pause briefly to leave the currently displayed character in place and move on to the next place in the text entry field.
- Press  to create a space in the text entry field.
- Press  under DELETE to delete one character. Press and hold  under DELETE to delete an entire entry.

Using Word Mode

In Word mode, T9 Text Input analyzes the letters on the keypad button you press and arranges them to create words. As you type, T9 Text Input matches your keystrokes to words in its database and will display the most commonly used matching word.

Special Key Functions

Some of your phone's keys assume different functions while in T9 Text Input Word mode.

Backspace and Erase

Press  under DELETE once to backspace or to erase a single character. Press and hold  under DELETE to erase the entire text entry field.

Space

Press  once to accept a word and insert a space when entering text.

Next Word in Database

Press  to display more words in the database that match the keystroke sequence you entered.

Shift and Caps Lock

Press  to make the next letter typed uppercase (Shift), to make all subsequent letters types uppercase (Caps Lock), or to go back to lowercase letters.

These icons appear in the top row of your display screen:

-  for Shift to uppercase
-  for Caps Lock

When neither of these icons appear, letters typed are lowercase.

NOTE: T9 Text Input automatically makes the first letter of a sentence uppercase.

Punctuation

In Word mode, T9 Text Input uses Smart Punctuation to quickly apply basic rules of grammar to insert the correct punctuation within a word and at the end of a sentence.

Press  to insert punctuation. One of eight basic punctuation symbols will be inserted (, , - ' @ : ? ;).

Press  to change the inserted punctuation symbol to another of the eight basic punctuation symbols.

Press  to accept the punctuation and continue typing.

NOTE: Additional punctuation symbols are available in Symbols mode.

Entering a Word

To enter a word using Word mode:

1 Choose Word as your text entry mode.

2 Type a word by using one key-press per desired letter.

For example, to type “test” press    .

NOTE: The displayed word may change as you type it. Do not try to correct the word as you go. Type to the end of the word before editing.

- 3 If the word that appears is not the desired word, press  to change the word on the display to the next most likely word in the database.

Repeat until the desired word appears.

If the desired word does not appear, you can add it to the database of words using the instructions in “Adding Words to the User Database” on page 32.

Adding Words to the User Database

To add words to the T9 database:

- 1 Change from Word text entry mode to Alpha text entry mode.

- 2 Type the word using Alpha text entry mode.

- 3 Return to Word text entry mode.

- 4 Press  to add a space.

The word you typed in Alpha text entry mode is now in the database.

NOTE: You can not store alphanumeric combinations, such as Y2K.

Choosing a Language

To change the language of the T9 Text Input database:

- 1 From any screen that requires text input, press  to access the **Entry Method** menu.

- 2 Press  to scroll to **Languages**.

- 3 Press  under **SELECT**.

- 4 Press  to scroll to the language you want T9 Text Input to use.

- 5 Press  under **SELECT**.

Using Numeric Mode

To use Numeric text entry mode, choose Numeric as your text entry mode and press the number buttons on your keypad to enter numbers.

Using Symbols Mode

To use Symbols text entry mode:

- | | |
|---|--|
| 1 | Choose Symbols as your text entry mode. |
| A row of 32 symbols appears along the bottom of your phone's display screen, just above the display option and menu icon. (Press  to view the complete row.) | |
| 2 | Press  to highlight the symbol you want to enter into the text entry field. |
| 3 | Press  under SELECT to enter the symbol. |

Display Essentials

Your i90c phone's two display screens tell you what you need to know as you use your phone.

This section includes:

Display Screens	Page 35
Status Icons	Page 37
Text Display Area	Page 39
Call Information Icons	Page 39
Menu Icon	Page 40
Display Options	Page 40
Navigating Menus and Lists	Page 40
Main Menu Options	Page 41

Display Screens

Any time your phone is powered on, the display screens provide you with information and options.

When your phone cover is open, the full-sized display screen on the inside of the cover provides detailed information about all of your phone's functions.

When your phone cover is closed, the one-line display screen on the outside of the cover provides brief information about your phone's status, incoming and outgoing calls, call alerts, message notifications, Voicemail, and Datebook events.

Opening and Closing Phone Cover

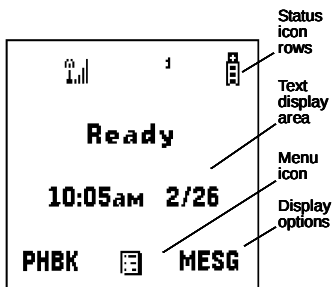
If you are viewing information on your phone's one-line display screen, you can always open the phone cover to view more detailed information on the full-sized display screen. However, if you are viewing information on the full-sized display screen, closing the phone cover terminates any activity your phone is engaged in — except powering up, transferring data, and running Java applications.

USER TIP: You can set your phone not to end phone calls when you close the phone cover. See “Setting Flip Activation” on page 155.

Full-Sized Display Screen

The full-sized display screen consists of:

- status icon rows — the top two rows display status. See “Status Icons” on page 37.
- text display area — displays up to seven lines of text and icons. See “Text Display Area” on page 39.
- menu icon — see “Menu Icon” on page 40.
- display options — see “Display Options” on page 40.



One-Line Display Screen

The one-line display screen displays a small amount of text and one icon on each side of the text.



The text displays a shortened version of information displayed on the full-sized screen. To see more complete information, open the phone cover.

The icon area on the left may display:

- signal strength icon. See “Status Icons” on page 37.
- call information icon. See “Call Information Icons” on page 39.
- recent call icon. See “Recent Call Icons” on page 68.
- message icon. See “Messages” on page 83.
- missed call icon. See “Missed Calls” on page 71.

The icon area on the right may display:

- battery strength icon. See “Status Icons” on page 37.
- Phonebook type icon for your current call or most recent call. See “Phonebook Icons” on page 44.

The Ready Screen

The illustrations of the full-sized display screen shows the **Ready** screen. The illustration of the one-line display screen shows the one-line equivalent of the **Ready** screen. These are only examples. The appearance of these screens is determined by your wireless communications provider.

The **Ready** screen displays any time the phone is powered on, but not engaged in some activity. You must start at the **Ready** screen to access many of your phone’s features and functions. You can always access the **Ready** screen by pressing .

USER TIP: When your phone cover is closed, you can access the one-line equivalent of the Ready screen by pressing .

Status Icons

Status icons appear in the two rows at the top of the full-sized display screen. Some appear at all times. Others appear only when your phone is engaged in certain activities or when you have activated certain features.

Icon	Indicates...
	Battery Strength icons — remaining battery charge. More bars on the battery indicate a greater charge. See “Battery Charging Status” on page 15 for detailed information about battery strength icons.
	Signal Strength icons — strength of the network signal. More bars next to the antenna indicate a stronger signal.
	Active Line icons — currently active phone line; ¹ indicates Line 1 is active; ₂ indicates Line 2 is active.

	Call Forward icons — phone is set to forward calls. See “Call Forwarding” on page 78 for more information.
	Phone In Use — phone is connected on an active call.
	Private In Use — number being called is a Private ID.
	Talkgroup In Use — phone is active on a group call.
	Packet Data Ready — phone is ready to receive data through a data cable.
	Packet Data Activity — phone is transmitting data.
	Mobile IP — phone is ready to access the wireless Internet.
	Secure Data — phone is accessing the Internet using a secure connection.
	Text Message — you have one or more Text Messages or Net Alert messages.
	Voicemail — you have one or more voice mail messages.
	FaxMail — you have one or more FaxMail messages.
	Speaker Off — phone's speaker is off.
	Ring/Vibe icons — you have customized the way in which the phone is set to notify you when you receive calls and other types of messages. See “Ring Style and Notification Type” on page 143 for more information.

	T9 Text Input icons — you are using T9 Text Input to enter text. See “Using T9 Text Input” on page 28 for more information.
	TTY — your phone supports TTY devices and communications

The icon of the main menu feature in use always appears in the top left of the status icon rows. For a list of the main menu icons, see “Main Menu Options” on page 41.

Text Display Area

The full-sized display screen’s text display area displays menu options, messages, names, phone numbers, and other information.

The number of lines of text shown in the text display area depends on which display view is selected — Standard view, Compressed view, or Zoom view. (For more information, see “Setting Text Display” on page 154.) In Standard view, five lines of text are displayed.

NOTE: Standard view is the default display setting. Unless otherwise noted, illustrations in this User’s Guide depict Standard view.

Call Information Icons

Each of the following icons appears on the left side of the text display area of the one-line screen or the full-sized screen, providing you with information about your calls.

Icon	Indicates...
	In Call - phone is on an active call.
	Incoming Call - phone is receiving an incoming call.
	Outgoing Call - phone is placing an outgoing call.
	On Hold - phone has a call on hold.
	End Call - phone has ended active.

Menu Icon

The menu icon  appears on any screen from which a menu can be accessed. To access a menu, press  on your keypad. This key has the menu icon printed on it.

Menus are context sensitive. The menu that appears depends on the screen you access it from and the items on the menu apply to the task you are currently performing.

Pressing  from the **Ready** screen accesses the main menu.

Display Options

On the full-sized display screen, two display options appear at the bottom of most screens. These options enable you to perform a wide variety of actions, including changing, saving and viewing information, running programs, and canceling previous actions. You activate a display option by pressing .

The **Ready** screen display options provide quick access to two main menu features. By default, the Phonebook (PHBK) and Messages (MSG) display options appear on the **Ready** screen. You can control which display options appear on the **Ready** screen using the phone's Personalize feature in the Settings menu (see "Changing Ready Screen Options" on page 149).

The display options on screens other than the **Ready** screen cannot be customized.

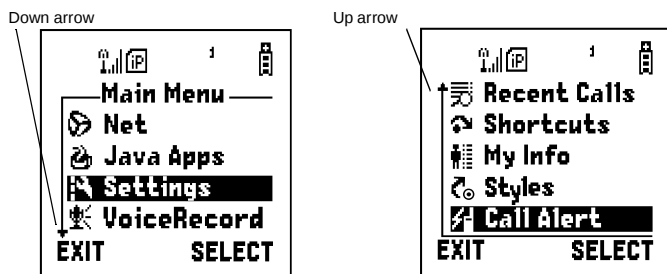
Navigating Menus and Lists

The i90c phone is menu driven. By navigating menus, you access submenus which lead to all of the functions and features that are built into your phone. Use the menus to store calls, manage your Phonebook and Datebook, change your phone settings, browse the Internet, and more.

Some features include lists of names, numbers, or other information. These list items can be accessed the same way menu options are.

To access the items in a menu or list, scroll using the four-way navigation key at the top of your keypad. Scroll down by pressing the lower portion of the navigation key . Scroll up by pressing the upper portion of the navigation key . Holding down the appropriate part of the navigation key speeds up scrolling. You can set your phone to stop scrolling when you reach the bottom or top of the menu list, or "wrap-around" to the opposite end. See "Setting Scrolling" on page 154 for more information.

If more items appear in a menu or list than can be displayed in the text area, a down arrow or up arrow appears in the left side of the screen indicating that more options may be accessed by scrolling up or down.



Main Menu Options

By default, the main menu options appear in the order determined by your service provider. You can change the order in which they appear by using the Personalize feature (see “Reordering Main Menu” on page 149).

To access the main menu, press  from the **Ready** screen:

Menu Item	Use to ...
 Net	Browse the Web.
 Java	Run pre-installed and download custom Java applications on your phone.
 Settings	Customize your phone: Ring/Vibe, Phone Setup, In Call Setup, Security, Personalize, Initial Setup, Voice Volume, and Talkgroup Settings.
 VoiceRecord	Record personal messages or the incoming portion of phone calls to play back at a later time.
 Phonebook	Store and retrieve a list of stored entries for calling, editing, viewing, and deleting.

 Messages	Receive, store, access, and manage Voicemail, FaxMail, Text Messages, and Net Alert.
 Call Forward	Settings for forwarding calls in various situations.
 Datebook	Schedule and organize events, by the day or the month, such as appointments and meetings.
 Memo	Input and store numbers to access later.
 Call Timers	Display the duration of phone calls, private or group calls, circuit data use, and Kilobytes sent and received.
 Recent Calls	Access a list of the last 20 sent, received, or missed calls. Calls can be made from this list.
 Shortcuts	Associate a menu option with a number on the alphanumeric keypad for quick and easy access.
 My Info	View the name, Private ID, phone numbers for lines 1 and 2, IP address, and circuit data number of your phone.
 Styles	Create or edit a group of settings and save them as one for use in different environments.
 Call Alert	Store received call alerts to respond to at your convenience.

To choose the highlighted main menu selection, press  under SELECT. To exit the main menu and return to the **Ready** screen, press  under EXIT, or press , or close the phone cover.

Phonebook

The Phonebook allows you to store up to 250 frequently used names and numbers.

When you store information in your Phonebook, it is saved on your SIM card. If you move your SIM card to another SIM-based phone, you can access information in your Phonebook from that phone.

NOTE: If you use a different SIM card in your phone, some information stored in the phone will be lost. See “Inserting/Removing the SIM Card” on page 23.

This section includes:

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Accessing Phonebook with an *i2000*, *i2000plus*, or GSM Phone

If you plan to use the information stored in your Phonebook with an *i2000*, *i2000plus*, or any other GSM phone, you must use CompanionPro. Go to **www.motorola.com/iden** or your service provider's web site for more information.

You can use CompanionPro to make the Phonebook information saved to your i90c phone's SIM card accessible in this type of phone.

NOTE: Private ID numbers and Talkgroup numbers do not have associated Speed Dial numbers.

Phonebook Entries and Speed Dial Numbers

Your Phonebook can store multiple numbers to a single name. For example, you can enter someone's name into your Phonebook once and then assign that person's home, office, mobile phone, and fax numbers to the name. You can store up to seven phone numbers, a Private ID, a Talkgroup ID, and an IP address.

Each number stored in your Phonebook is automatically assigned a Speed Dial number that corresponds to its location in your Phonebook. Each phone number uses one Speed Dial location, even if it is assigned to the same name as other phone numbers. The phone number stored in location 1 is assigned Speed Dial number 1, the phone number stored in location 2 is assigned Speed Dial number 2, and so forth, to location 250.

Phonebook Icons

Icons that appear to the right of entries in your Phonebook convey information about those entries.

When you enter a number in your Phonebook, you can designate the number's type using any of the following icons:

	Mobile
	Private ID
	Work
	Main

	Home
	Pager
	Fax
	Other
	Talkgroup
	IP Address

For more information on entering numbers into your Phonebook, see “Adding Phonebook Entries” on page 49.

The “picker” arrows appearing around the number type icon indicates multiple phone numbers stored under one name:

	pickers
---	---------

The Voice Name icon appearing to the left of one of the number type icons indicates that a voice name is associated with the Phonebook entry:

	Voice Name
---	------------

Voice Names

A voice name is an audio recording you make by speaking into your *i90c* phone that you assign to a number in your Phonebook. You can then dial the number by speaking the words you recorded into the phone. Your Phonebook can store up to 20 voice names.

See step 6 of “Adding Phonebook Entries” on page 49 for more information on creating a voice name.

Accessing Your Phonebook

If PHBK is one of your display options:

From the **Ready** screen, press  under PHBK.

If PHBK is not one of your display options:

1 From the **Ready** screen, press .

2 Press  to scroll to **Phonebook**.

3 Press  under SELECT.

USER TIP: You can also access the Phonebook by pressing  while your phone is in a phone call or private call.

This brings you to the **Phonebook** screen. From this screen, you can view, sort, add, edit, and delete Phonebook entries, check Phonebook capacity, or make calls.

About Phonebook Entries

Each Phonebook entry may contain the following information:

- The name associated with the entry. Typically, this is the name of the person whose number you are storing in the Phonebook.
- The number to be stored. Every Phonebook entry must contain a number and a type. This number may be any type of phone number, Private ID or Talkgroup number, or an IP address.
- The type of number to be stored: Mobile, Private, Work, Main, Home, Pager, Fax, IP, Other, or Talkgroup.
- A Speed Dial number. You may accept the default Speed Dial number or assign a different one.
- A voice name audio recording for voice-activated dialing.

Viewing Phonebook Entries

Names with more than one number assigned to them appear with  surrounding the icon to the right of the name. For example, if you had stored a home and work number for Joe Smith, the entry for Joe Smith's home phone number would look like this:

Joe Smith 

When the name is highlighted, press  to scroll to the icons representing each of the numbers assigned to that name.

To view any of the numbers assigned to a name:

- 1 From the **Phonebook** screen, press  to scroll to the name associated with the number you want to see.
- 2 Press  to view the icons representing the numbers assigned to that name.
- 3 When the icon representing the number you want to view is displayed, press  under VIEW.

If there is a Private ID or a Talkgroup number stored for the person, press . Then press  to scroll to **View** and press  under SELECT.
- 4 Press  to view the other numbers stored for this name.

Sorting Phonebook Entries

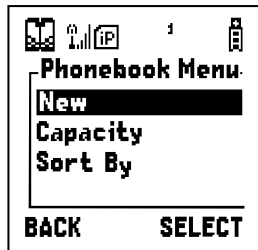
You can sort your Phonebook entries by:

- Name — the name you entered for the entry.
- Speed # — the Speed Dial location of the entry.

NOTE: Private calls can not be made from the Phonebook when sorted by Speed Dial location.

To sort your Phonebook list:

- 1 From the **Phonebook** screen, press  to view the **Phonebook Menu** screen.



- 2 Press  to scroll to **Sort By**.
- 3 Press  under **SELECT**.
- 4 Press  to scroll to the desired sorting method: **Name** or **Speed #**.
- 5 Press  under **SELECT**.

Checking Phonebook Capacity

Your Phonebook can store up to 250 numbers. To see how many entries are stored in your Phonebook:

- 1 From the **Phonebook** screen, press  to view the **Phonebook Menu** screen.
- 2 Press  to scroll to **Capacity**.
- 3 Press  under **SELECT**.

The **Capacity** screen shows how many storage spaces in you Phonebook are in use and how many are empty.

Adding Phonebook Entries

Using the following instructions, you will enter the information in the order the items appear on the Phonebook entry details screen. However, you can enter this information in any order by pressing  to scroll through the items on the entry details screen.

You can leave any item blank or unchanged by pressing  to scroll past it on the entry details screen. Only a number and type are required for a valid Phonebook entry.

After you have entered a phone number and any other information you wish to include, you can press  under DONE to save the Phonebook entry.

To cancel a Phonebook entry at any time, press  to return to the **Ready** screen.

To add a Phonebook entry:

1 Access the entry details screen:

From the **Phonebook** screen, with **[New Entry]** highlighted, press  under SELECT. If **[New Entry]** is not at the top of your list of entries, press  to scroll to the bottom of the list.

Or,

From the **Phonebook** screen, press . Then press  to scroll to **New** and press  under SELECT.



- 2 If you want to assign a name to your Phonebook entry:

With the **Name** field highlighted, press  under CHANGE.

From the **Name** screen, enter the name using the alphanumeric keypad.

See “Using T9 Text Input” on page 28 for information about entering text into this field.

When you are finished, press  under OK.

The entry details screen returns with the **Type** field highlighted.

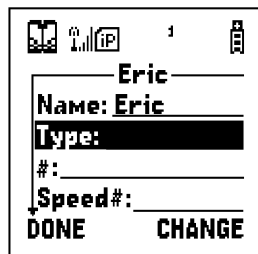


- 3 With the **Type** field highlighted, press  under CHANGE.

From the **Type Editor** screen, press  to scroll to the type of number you want to assign to the Phonebook entry.

Press  under SELECT.

The entry details screen returns with the # field highlighted.



- 4 Assign a number to your Phonebook entry:

With the # field highlighted, press  under CHANGE.

Type the number using the alphanumeric keypad. For phone numbers, use the 10-digit format.

To delete a digit, press  under DELETE.

See “Pause Digit Entry” on page 56 and “Plus Dialing” on page 57 for information on using these features when storing phone numbers in your Phonebook.

NOTE: The number can be up to 20 characters long.

When you are finished, press  under OK.

The entry details screen returns with the **Speed #** field highlighted.



- 5 The default Speed Dial number assigned to the Phonebook entry is displayed in the **Speed #** field. This is always the next available Speed Dial location.

If you want to assign the phone number to a different Speed Dial location:

With the **Speed #** field highlighted, press  under CHANGE.

Press  under DELETE to delete the current Speed Dial number.

Type the new Speed Dial number using the alphanumeric keypad.

When you are finished, press  under OK.



- 6 If you want to assign a voice name to the number:

With the **Voice Name** field highlighted, press  under RECORD.

As directed by the screen prompts, say and repeat the name you want to assign to the number. Speak clearly into the microphone.

An  icon appears in the **Voice Name** field indicating that the voice name has been recorded.

USER TIP: For best results, record in a quiet environment.



- 7 If you want to store more numbers to the name associated with this Phonebook entry:

Press  to scroll to **Type** and then press  under SELECT.

A new **Type** field appears for the additional number.

Enter the information for the additional phone number using step 3 through step 7.

NOTE: Each name in your Phonebook may have up to seven phone numbers, one Private ID, one Talkgroup number, and one IP address associated with it.



- 8 When you have entered all the information you wanted in this Phonebook entry, press  under DONE.



Storing Phone Numbers and Private IDs Quickly

Your phone gives you two ways to store phone numbers quickly: from the **Ready** screen and from the Recent Calls list.

To store a number from the **Ready** screen:

- 1 From the **Ready** screen, use the alphanumeric keypad to enter the number you want to store.
- 2 Press  to access the **Dialing Menu** screen.
- 3 With **Store Number** highlighted, press  under SELECT.

This displays the **Store To** screen.
- 4 To store to a new entry, press  under SELECT. The entry details screen will display with the number entered in the field.

Or,

To store to an existing entry, press  to scroll the list of names in your Phonebook. Or press the first letter of the entry to jump to the entry. Once the desired entry is highlighted, press  under SELECT. The Phonebook information for that entry displays with the number entered in the # field.
- 5 From the entry details screen, press  to scroll to the first **Type** field.
- 6 From the **Type Editor** screen, press  to scroll to the selection that you want to assign to the phone number. Press  under SELECT.
- 7 If you want to add more information to the Phonebook entry, follow the applicable instructions in “Adding Phonebook Entries” on page 49.
- 8 Press  under DONE.

To store a number from the Recent Calls list:

- 1 From the **Recent Calls** screen, press  to scroll to the 10-digit telephone number you want to store.
- 2 Press  under **STORE**. This displays the Store To screen with **[New Entry]** highlighted.
- 3 To store a new entry, press  under **SELECT**. The entry details screen displays with the number entered in the # field and the **Type** field highlighted.

Or,

To store to an existing entry, press  to scroll the list of names in your Phonebook. Or press the first letter of the entry to jump to the entry. Once the desired entry is highlighted, press  under **SELECT**. The Phonebook information for that entry displays with the number entered in the # field and the **Type** field highlighted.
- 4 Press  under **CHANGE**. Press  to scroll to the type of number you want to assign to the Phonebook entry. Press  under **SELECT**.
- 5 If you want to add more information to the Phonebook entry, follow the applicable instructions in “Adding Phonebook Entries” on page 49.
- 6 Press  under **DONE**.

To store a Private ID from the Recent Calls list:

- 1 Press  to scroll to the Private ID number you want to store. Note: The Store option for Private ID numbers (e.g., 123*123*1234), will not display in the Recent Calls list.
- 2 With the **Private ID** highlighted, press  to access the **Rec. Calls Menu**. Press  to scroll to **Store**. Press  under **SELECT**. This displays the **Store** To screen with **[New Entry]** highlighted.

Follow step 3 through step 6 in “To store a number from the Recent Calls list:” on page 54.

Editing Phonebook Entries

1	From the Phonebook screen, press  to scroll to the entry you want to edit.
2	Press  to view the Phonebook Menu .
3	Press  to scroll to Edit .
4	Press  under SELECT. The entry details screen displays.
5	Follow the applicable instructions in “Adding Phonebook Entries” on page 49 to edit the various fields. NOTE: To add additional numbers to an existing entry, press  to scroll to the new Type and # fields. Press  under SELECT. Follow the applicable instructions in “Adding Phonebook Entries” on page 49.

Deleting Phonebook Entries

1	From the Phonebook screen, press  to scroll to the entry you want to delete.
2	Press  to view the Phonebook Menu .
3	Press  to scroll to Delete Contact or Delete Number . Delete Contact deletes the name and all numbers associated with that name. Delete Number deletes the number associated with the icon that is currently displayed in the Phonebook list for the name. The name and all the other numbers will remain.
4	Press  under SELECT. A warning screen displays requiring you to confirm the deletion.

Pause Digit Entry

When storing a number, you can program your phone so it will not only dial a number but also pause before entering another series of numbers such as a personal identification number (PIN) or password. This feature is particularly useful for accessing automated services such as voice mail and banking systems from your i90c phone.

Example: Let's say you have a company voice mail account that you frequently check while traveling. To access that account you must do the following:

- Dial your work number
- Press # while the voice mail greeting is being played
- Enter your PIN to access your messages

You can program your phone to enter all of the above information for you. By separating each entry with a pause. The stored data would look like this 17035551234P#P1234. In this example, the first eleven digits represent the number that must be dialed to access your voice mail. The P represents a 3 second pause. The # interrupts your greeting. The second P represents another 3 second pause. The last four digits represent your PIN.

To create a three-second pause, follow the steps below:

Press and hold  for two seconds. The pause symbol (P) will appear on the display screen.

You can enter up to 20 characters in a single entry, stored or dialed.

NOTE: You can program your phone to pause for more than 3 seconds. Performing the above step twice will program two pauses and cause your phone to wait 6 seconds before entering the next set of numbers.

Plus Dialing

This feature enables you to place an international call from most countries — without entering the local international access code. Use Plus Dialing for all Phonebook entries if you plan to travel outside the United States. Begin by following the instructions for “Adding Phonebook Entries” on page 49. Before you type the phone number to be stored:

- 1 Press and hold  for two seconds. A “0” appears, then changes to a “+”.

NOTE: The network translates the “+” into the appropriate international access code needed to place the call.

- 2 Enter the country code, city code, or area code, and phone number.

- 3 Follow the rest of the instructions for “Adding Phonebook Entries” on page 49.

Digital Cellular

The *i90c* phone enables you to make and receive domestic and international phone calls, make emergency calls, and be notified of a missed call.

This section includes:

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Receiving a Phone Call	Page 66
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Mute	Page 73
Call Waiting	Page 74
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Three-Way Calling	Page 78
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Making Phone Calls

Your *i90c* phone provides the following features for making phone calls:

- Direct Dial
- Phonebook
- Recent Calls
- Speed Dial

- Turbo Dial®
- Voice-Activated Dialing
- Last Number Redial
- TTY — your phone supports TTY devices and communications.

Using Direct Dial

- | | |
|----------|---|
| 1 | From the Ready screen, use the keypad to enter the number you want to call. |
| 2 | Press  to place the call. |
| 3 | Press  or close phone cover to end the call. |

NOTE: See “Plus Dialing” on page 57 for information on making international calls.

If you make a mistake:

- To clear one digit, press  under DELETE.
- To clear all digits, press and hold  under DELETE.
- To cancel, press .

Making Calls from the Phonebook

After you have entered phone numbers into your Phonebook, you can use these numbers to make phone calls. For information on entering numbers into your Phonebook, see “Adding Phonebook Entries” on page 49.

To make calls from the Phonebook:

- 1 From the **Ready** screen, if PHBK is one of your display options, press  under PHBK.

Or,

From the **Ready** screen, press , then press  to scroll to **Phonebook**. Press  under SELECT.

- 2 Press  to scroll through the names in your Phonebook.

Or,

Use the alphanumeric keypad to enter the first letter of the name and press  to scroll through the names beginning with that letter.

Stop when the name of the person you want to call is highlighted.

- 3 If more than one number is stored for the person you want to call,   appears around the icon to the right of the person's name.

Press  to scroll through the icons representing the numbers stored for that person.

Or,

Press  under VIEW to view all the numbers stored for this person. Then press  to scroll to the number you want to call.

Or,

If there is a Private ID or a Talkgroup number stored for this person, press . When the **Phonebook Menu** appears, press  to scroll to **View** and press  under SELECT. Then press  to scroll to the number you want to call.

For more information on assigning multiple numbers to one person, see “Adding Phonebook Entries” on page 49.

- 4 Press  to place the call.

- 5 Press  or close phone cover to end the call.

Making Calls from the Recent Calls List

Your phone stores the numbers of the last 20 calls you received or sent in the Recent Calls list.

Cover Open

- | |
|---|
| <p>1 From the Ready screen, press .</p> <p>Or,</p> <p>From the Ready screen, press . Press  to scroll to Recent Calls. Press  under SELECT.</p> |
| <p>2 Press  to scroll through the list received or sent recent calls until you reach the desired call.</p> |
| <p>3 To view additional information about the call:</p> <p>Press  under VIEW.</p> <p>Or,</p> <p>Press  to access the Rec. Calls Menu. Then press  to scroll to View and press  under SELECT.</p> |
| <p>4 Press  to place the call.</p> |
| <p>5 Press  or close phone cover to end the call.</p> |

Cover Closed

- | |
|--|
| <p>1 Press  on the top of your phone</p> |
| <p>2 Use the volume keys on the side of your phone to scroll through the list of recent call to the desire number.</p> |

- 3 To place the call, press  on the top of your phone.

The call will be placed with speakerphone on. See “Hands-Free Speakerphone” on page 73.

- 4 To end the call, press  again.

Using Speed Dial

Each phone number stored in your Phonebook is assigned a Speed Dial number. You can use the Speed Dial number to quickly place a call.

- 1 From the **Ready** screen, enter the Speed Dial number assigned to the phone number you want to call.

- 2 Press .

- 3 Press  to place the call.

- 4 Press  or close phone cover to end the call.

Using Turbo Dial

Turbo Dial allows you to call the numbers in your Phonebook associated with Speed Dial numbers 1 through 9 by pressing and holding the corresponding numeric key on the keypad.

Press and hold a number key (1 through 9).

NOTE: Turbo Dial cannot be accessed while the browser is active, nor while Keypad Lock or SIM Lock is active.

Making Calls Using Voice-Activated Dialing

If you have recorded a voice name for a phone number in your Phonebook (see “Voice Names” on page 45), you can use this voice name to call the number.

USER TIP: If you have difficulty making phone calls using a voice name, try assigning a longer voice name to the number. For example, if the voice name “Joe” fails to place a call to Joe Smith’s number, try assigning the voice name “Joe Smith” to the number.

Cover Open

- | |
|---|
| <p>1 From the Ready screen, press and hold  on the top of your phone until the Say Name Now screen appears.</p> |
| <p>2 Speaking into the microphone, say the voice name assigned to the phone number you want to call.</p> |
| <p>3 Your phone will play the name back to you.</p> <p>The call will automatically be placed.</p> |

Cover Closed

- | |
|--|
| <p>1 Press and hold  on the top of your phone until Say Name appears.</p> <p>NOTE: If you do not want to complete the call, press  at any time before the call is placed.</p> |
| <p>2 Speaking into the microphone, say the voice name assigned to the phone number you want to call.</p> |
| <p>3 Your phone will play the name back to you.</p> <p>The call will automatically be placed, with speakerphone on. See “Hands-Free Speakerphone” on page 73.</p> |

Last Number Redial

- | |
|---|
| <p>Press and hold  to redial the last number you called.</p> |
|---|

Making TTY Calls

NOTE: This feature may not be offered by your service provider.

You can use your phone to make calls using a TTY device.

When you make TTY call, the call begins in the TTY mode you last selected. You can change the TTY mode during a call. For more information on choosing a TTY mode, see “Setting TTY Mode” on page 156.



To make a call using a TTY device:

- 1 Connect one end of a 2.5mm cable into the jack on the phone. (To locate the jack, see page 12.) Connect the other end of the cord into your TTY device.
- 2 Enter the phone number you wish to call and press .

Placing International Phone Calls

When making an international call, you can either enter the international access code directly (011 in the United States) or use Plus Dialing.

You can make international calls from your Phonebook if you have stored the numbers with Plus Dialing. See “Adding Phonebook Entries” on page 49 and “Plus Dialing” on page 57 for more information.

NOTE: Your service default is “International Calls Restricted.” Therefore, you must contact Customer Care to obtain international dialing access.

To make an international call using Plus Dialing:

- 1 Press and hold  for two seconds. A “0” appears, then changes to a “+”.

NOTE: The network translates the “+” into the appropriate international access code needed to place the call.

- 2 Enter the country code, city code, or area code, and phone number.

- 3 Press  to place the call.

- 4 Press  or close phone cover to end the call.

Emergency Calling

Your phone supports emergency calling. Emergency calls can be made even when the SIM card is blocked or not in the phone.

To place a call in an emergency, dial 911. You will be connected to the nearest emergency dispatch center. If you are on an active call, you must end it before calling 911.

NOTE: If you have enabled the Keypad Lock feature, you must unlock the phone’s keypad before any call can be made, including 911 emergency calls.

Receiving a Phone Call

Incoming calls are indicated by a ring, vibration, or backlight illumination.

Cover Open

Press  or any key on the keypad or press  under YES to answer the call.

Cover Closed

Press  on the top of your phone. The call will be activated with speakerphone on. See “Hands-Free Speakerphone” on page 73.

Or, open the phone cover. The call will be heard through the earpiece.

USER TIP: You can turn down the ringer volume by pressing the volume buttons on the side of your phone while the phone is ringing.

Ending a Phone Call

Cover Open

Press  or close the phone cover to hang up.

Cover Closed

Press  to hang up.

Recent Calls

The Recent Calls feature stores the numbers of the 20 most recent calls you have made and received, including private and group calls. You can also view your most recent call on the one-line display screen without opening your phone cover.

With the phone cover open, you can access the Recent Calls list to:

- view your recent calls
- store numbers to the Phonebook
- delete recent calls
- call numbers on the Recent Calls list

With the phone cover closed, you can access Recent Calls list to:

- view your recent calls
- call numbers on the Recent Calls list

The Recent Calls list displays briefly on the full-sized display screen after you end a call. The most recent call displays briefly on the one-line display screen.

Recent Call Icons

For private calls, Talkgroup calls, and numbers stored in your Phonebook, an icon appears to the right of the name of number indicating the Phonebook type of the number used in the call. See “Phonebook Icons” on page 44 for more information about Phonebook types.

For phone calls, an icon appears to the left of the name or number indicating the type of call:

-  indicates an incoming call
-  indicates an outgoing call
-  indicates a missed call. (Missed calls appear on your Recent Calls list only if you have Caller ID.)
-  indicates a Private Call
-  indicates a Group Call

Viewing Recent Calls

If the number of the recent call is stored in your Phonebook, the name associated with the phone number is displayed.

Cover Open

To view your Recent Calls list:

- 1 From the **Ready** screen, press .

Or,

From the **Ready** screen, press . Press  to scroll to **Recent Calls**. Press  under SELECT.

- 2 Press  to scroll the list of recent calls.

Cover Closed

To view your most recent call with the phone cover closed:

Press  on the top of your phone, and use the volume keys to scroll through the list of recent calls.

Press  again to dismiss the display.

Getting Detailed Information About Recent Calls

To get more information about a recent call:

1 From the **Recent Calls** screen, press  to scroll to the call you want more information on.

2 Press  under VIEW.

Or,

Press  to access the **Rec. Calls Menu**. Then press  to scroll to **View** and press  under SELECT.

The screen that appears displays information such as the name associated with the number of the recent call, the number, the date, time, and duration of the call.

Storing a Recent Call Number to the Phonebook

To store a number from the Recent Calls list to the Phonebook:

1	From the Recent Calls screen, press  to scroll to the number you want to store.
2	Press  under STORE . Or, Press  to access the Rec. Calls Menu . Press  to scroll to Store . Press  under SELECT . This displays the Phonebook entry details screen with the # field filled in with the number of the recent call.
3	If you want to add more information to the Phonebook entry, follow the applicable instructions in “Adding Phonebook Entries” on page 49.

Calling From the Recent Calls List

See “Making Calls from the Recent Calls List” on page 62.

Deleting Recent Calls

To delete a recent call:

1	From the Recent Calls screen, press  to scroll to the call you want to delete.
2	Press  to access the Rec. Calls Menu .
3	Press  to scroll to Delete .
4	Press  under SELECT .
5	Press  under YES to confirm the deletion.

To delete all calls on the Recent Calls list:

1	From the Recent Calls screen, press  to access the Rec. Calls Menu .
2	Press  to scroll to Delete All .
3	Press  under SELECT .
4	Press  under YES to confirm the deletion.

Accessing Voice Records From Recent Calls

You can access the Voice Record feature from Recent Calls and use it to record spoken messages that you can listen to later.

1	From the Recent Calls screen, press  to access the Rec. Calls Menu .
2	Press  to scroll to VoiceRecord .
3	Press  under SELECT .

For more information about Voice Record, see “Voice Record” on page 117.

Missed Calls

If you miss a call when your phone cover is closed, the one-line screen displays the missed call icon  and text indicating the number of calls you have missed.

If you open the cover, the **Recent Calls** list appears on the full-sized screen.

If you do not open the cover, pressing  dismisses the missed call message. Pressing  again displays the most recent call, allowing you to call the number (see “Viewing Recent Calls” on page 68).

Call Timers

Call Timers measure the duration of your phone calls, Private or Group calls, and circuit data use, as well as the number of Kilobytes sent and received by your phone.

The **Call Timers** menu displays the following options:

- **Last Call** — displays the duration of your most recent phone call.
- **Phone Reset** — keeps a running total of your phone call minutes, until you reset it.
- **Phone Lifetime** — displays the total minutes of all your phone calls.
- **Prvt/Grp Reset** — keeps a running total of all of your Private and Group call minutes, until you reset it.
- **Prvt/Grp Lifetime** — displays the total minutes of all your Private and Groups calls.
- **Circuit Reset** — keeps a running total of all of your circuit data use, until you reset it.
- **Circuit Lifetime** — displays the total minutes of all of your circuit data use.
- **Kbytes Reset** — keeps a running total of the number of Kilobytes sent and received by your phone, until you reset it.

To view the **Call Timers** menu:

1	From the Ready screen, press  .
2	Press  to scroll to Call Timers .
3	Press  under SELECT.

To view or reset a Call Timers option:

1	From the Call Timers menu, press  to scroll to the Call Timers option you want to view or reset.
2	Press  under SELECT.
3	If the feature does not include an option to reset or you do not wish to reset the option, press  under DONE when you are finished viewing. To reset a feature, press  under RESET. When the confirmation screen appears, press  under YES to confirm the reset.

NOTE: The values displayed by Call Timers are not intended for billing purposes.

Hands-Free Speakerphone

The i90c phone provides the convenience of a hands-free speakerphone for holding impromptu meetings or placing safer phone calls.

NOTE: During speakerphone operation, you may either speak or listen, but you cannot do both at the same time.

Cover Open

The speakerphone option (SPEAKER) is available whenever you are on an active call with the phone cover open.

To turn the speakerphone on:

While on an active call, press  under SPEAKER.

While speakerphone is on, **Spkrphone On** appears in the text display area.

To turn the speakerphone off:

Press  under SPEAKER.

Cover Closed

Speakerphone is always on when you are on an active call with the cover closed. If you open the cover, speakerphone is turned off and the call will be heard through the earpiece.

Mute

Use the Mute feature to listen to incoming audio without allowing sound from your phone's microphone to be transmitted over the phone line.

To turn mute on:

While on an active call, press  under MUTE.

While mute is on, UNMUTE appears as a display option.

To turn mute off:

Press  under UNMUTE.

Call Waiting

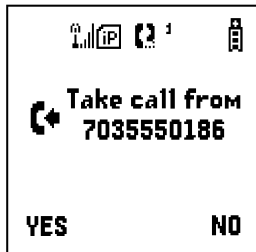
Call Waiting allows you to receive a second call while you are talking on the phone. You can switch between calls so you never have to miss a call. By default, Call Waiting is always on unless you turn it off for a specific call.

If you're on a call and you receive a second call, you will:

- Hear a tone; and
- See a message on your display informing you of another incoming call.

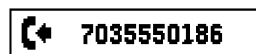
Cover Open

If you have your phone cover open when you receive a second call, the message displayed looks like this:



Cover Closed

If you have the phone closed when you receive a second call, the message display looks like this:



You must open the phone cover to accept or decline the second call. Opening the cover turns speakerphone off.

Accepting Calls

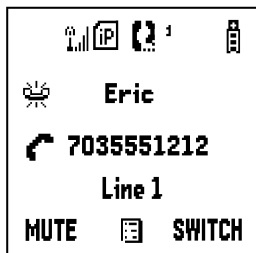
Press  under YES. The first call is placed on hold.

To end the active call and accept the second call:

Press . Then press  or press  under YES

Switching Between Calls:

When you accept a second call while you are talking on the phone, your display shows the name or number of each call. An icon appears to the left of each name or number indicating that the call on hold  or active .



Declining Calls

Press  under SWITCH to switch between calls.

Cover Open

Press  under NO. If you subscribe to Voicemail, the call will be forwarded to your Voicemail box.

Cover Closed

Press  on the top of your phone. If you subscribe to Voicemail, the call will be forwarded to your Voicemail box.

Ending the Active Call

Press  or close the phone cover.

NOTE: If you have an active call and another call waiting, closing the phone cover ends both calls.

Turning Off Call Waiting

If you do not want to be interrupted during a call, you can turn Call Waiting off prior to making/receiving a call.

- 1 From the **Ready** screen, press . Press  to scroll to **Settings**, and press  under **SELECT**.
- 2 Press  to scroll to **In Call Setup** and press  under **SELECT**.
- 3 Press  to scroll to **Call Waiting** and press  under **CHANGE**.
- 4 Press  to scroll to **Off** and press  under **SELECT**.

Call Waiting is now disabled for the next call. It will automatically reset to **On** when you end the call.

Call Hold

When you are on an active call, you can place the call on hold and make a second call.

To place an active call on hold:

- 1 Press  to access the **Call Menu**.
- 2 Press  to scroll to **Hold**.
- 3 Press  under **SELECT**.
- 4 If you have not placed a second call, you can resume this call by pressing  under **RESUME**.

To place a second call while the first call is on hold:

- 1 Enter the second phone number you want to call.

Or, select the number from your Phonebook by pressing  and selecting **Phonebook**.
- 2 Press  to place the second call.

To toggle between the two calls:

Press  under SWITCH.

To end the active call:

Press . The call on hold becomes active.

NOTE: Closing the phone cover ends the active call and the call on hold.

Three-Way Calling

Using Three-Way Calling, you can combine two ongoing phone calls into one conversation. While on an active call, you can make a second call and combine the two calls.

To make a three-way call:

- 1 Place or receive a phone call.
- 2 While on the call, press  to access the **Call Menu**.
- 3 Press  to scroll to **3 Way**.
- 4 Press  under SELECT. The first call will be placed on hold.
- 5 Enter the second phone number you want to call and press  to place the second call.

Or, access the number from your Phonebook:
Press  and then press  to scroll to **Phonebook**.
Press  under SELECT.
To place the call, see “Making Calls from the Phonebook” on page 60.
- 6 After you reach the second individual, press .

7 Press  to scroll to **3 Way**.

8 Press  under **SELECT**.

Both calls will appear on your display.

Call Forwarding

Call Forwarding forwards calls to the number you designate. The following Call Forwarding options are available:

- **All Calls** — When this option is turned on, all calls will be sent automatically to a number you specify.
- **Detailed** — Choosing this option enables you to forward calls you missed to different numbers, or to Voicemail, depending on why you missed each call:
 - **Busy** — your phone is engaged in other activities.
 - **No Answer** — you do not answer. The phone will ring 4 times before forwarding the call.
 - **Unreachable** — your phone is out of coverage or powered off.

You can forward Line 1 and Line 2 independently.

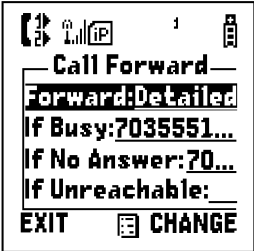
When your phone is set to forward all calls, one of the following icons appears on the top row of your display screen to indicate the call forwarding option you have chosen:

Icon	Indicates...
	Line 1 is active; calls from Line 1 are being forwarded.
	Line 1 is active; calls from Line 2 are being forwarded.
	Line 1 is active; calls from Line 1 and Line 2 are being forwarded.
	Line 2 is active; calls from Line 1 are being forwarded.

	Line 2 is active; calls from Line 2 are being forwarded.
	Line 2 is active; calls from Line 1 and Line 2 are being forwarded.

NOTE: Call Forwarding must be set to Detailed with the voice mail access number to receive voice mail messages. This is the default setting.

Turning On Call Forwarding

1	Press  then press  to scroll to Call Forward .
2	Press  under SELECT.
3	At the Call Forward screen, the Forward field is highlighted. Press  under CHANGE. 
4	Press  to scroll to All Calls .
5	Press  under SELECT.
6	Press  to scroll to the To field and press  under CHANGE.

7 To activate a call forwarding number:

If you have never used Call Forwarding before, the **Forward** screen appears. To enter a call forwarding number, type the number on your phone's keypad or press  under SEARCH to select from numbers stored in your phone. Press  under OK.

Or,

If you have used Call Forwarding before, the call forwarding number you last used is displayed. Press  under CHANGE to access the **Forward** screen.

To forward your calls to this number, press  under OK.

To forward your calls to a different number, press and hold  under DELETE to erase the displayed number. Type the new number on your phone's keypad or press  under SEARCH to select from numbers stored in your phone. Press  under OK.

Your calls will now be forwarded to the number that you selected.

Turning Off Call Forwarding

1 Press  then press  to scroll to **Call Forward**.

2 Press  under SELECT.

The **Call Forward** screen displays with the **Forward** field highlighted.

3 Press  to scroll to the **To** field and press  under **CHANGE**.

4 Press  to scroll to **Off** and press  under **SELECT**.



Messages

The main topics covered in this section are listed below:

Receiving Messages	Page 83
Message Center	Page 87
Using Voicemail	Page 87
Using Text and Numeric Messaging	Page 88
Using Net Alert	Page 90
Using Your Phone as a Modem	Page 90

NOTE: If your service provider supports mobile originated text messaging, see “Mobile Originated Text Messaging” on page 93. Your Message Center will look slightly different than the one described in this section.

Receiving Messages

Whether your phone cover is open or closed, your phone alerts you when you receive a new Voicemail message, Text and Numeric message, or Net Alert message.

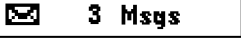
You must open the phone cover to access, delete, or save messages, but you can view and dismiss message alerts with the cover open or closed.

Message Alerts

If you are not on a call when you receive a message, your phone sounds an alert tone every 30 seconds until you dismiss the alert.

If you are on a call when you receive a message, your phone may sound an alert tone during the call or after you end the call, depending on your phone’s settings (see “In Call Setup” on page 147).

Your phone screens display the message alert:

Message Type	Cover Closed	Cover Open
Voicemail		 The screen shows status icons at the top: signal strength, IP, and battery level. The main text reads "New Voicemail Message". At the bottom, there are two options: "EXIT" and "CALL".
	 The screen shows a small envelope icon and the text "Message".	
Text Messages		 The screen shows status icons at the top: signal strength, IP, and battery level. The main text reads "New Text Message". At the bottom, there are two options: "EXIT" and "READ".
	 The screen shows a small envelope icon and the text "3 Msgs".	
Net Alert		 The screen shows status icons at the top: signal strength, IP, and battery level. The main text reads "New Browser Message". At the bottom, there are two options: "EXIT" and "GOTO".
	 The screen shows a small envelope icon and the text "3 Msgs".	

These message alert screens appear if the new message is the only message you have.

If you already have one or more messages when a new message is received:

- cover open — the screen shows the number of messages that are the same type as the new message.
- cover closed — the screen shows the total number of messages of all types combined.

Dismissing Alerts

When you dismiss a message alert, the message alert display disappears from the screen and your phone stops sounding alert tones, but the message is not deleted. You can access the message through the Message Center. See “Message Center” on page 86 for more information.

Cover Open

To dismiss an alert with the cover open, you must close the cover or choose to access the message or exit the new message screen.

For more information on accessing messages, see “Using Voicemail” on page 87, “Using Text and Numeric Messaging” on page 88, and “Using Net Alert” on page 90.

Cover Closed

To dismiss a message alert while you are not on a call:

Press  or open phone cover.

To dismiss a message alert while you are on a call:

Open phone cover.

Or,

Press  to end the call and then press  again to dismiss the alert.

NOTE: To transfer an incoming call to Voicemail, press .

After you have dismissed a message alert, you must open the phone cover to access the message. When you open the cover, a message alert screen appears on the full-sized screen, but no more alert tones will sound.

Message Center

The Message Center enables you to access all your messages through one screen.

To access the Message Center:

If MMSG is one of your display options:

From the **Ready** screen, press  under MMSG.

If MMSG is not one of your display options:

1 From the **Ready** screen, press .

2 Press  to scroll to **Messages**.

3 Press  under SELECT.

The **Message Center** screen displays the number of messages you have in each message service — **VoiceMail** (Voice Mail), **Text Msgs** (Text and Numeric Messages), and **Net Alert** (Net Alert).

To access any message service:

1 From the **Message Center** screen, press  to scroll to the message service you want to access.

2 Press  under the display option on the right. This option varies depending on the message service selected.

Using Voicemail

Transferring Calls to Voicemail

Cover Open

Press  under NO while your phone is ringing to transfer incoming calls directly to Voicemail.

Cover Closed

Press  while your phone is ringing to transfer incoming calls directly to Voicemail.

Accessing New Messages

When you receive a message, you can listen to it immediately or later.

Listening to a Message Immediately

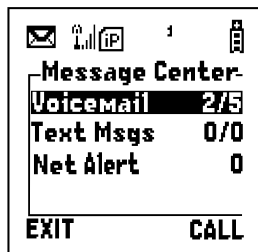
Press  under CALL to log into your Carrier's Voicemail System. **Calling** displays as you are connected to the network.

Listening to a Message Later

Press  under EXIT. The  icon will appear on the **Ready** screen to remind you that you have a stored Voicemail message.

Accessing All Messages

- 1 Access the **Message Center** screen (see “Message Center” on page 86). If **Voicemail** is not highlighted, press  to scroll to **Voicemail**. The number of new messages and the total number of messages are displayed.



- 2 Press  under **CALL** to log into your Carrier's Voicemail System. **Calling** displays as you are connected to the network.

Using Text and Numeric Messaging

NOTE: If your service provider supports mobile originated text messaging, see “Mobile Originated Text Messaging” on page 93.

With Text and Numeric Messaging, your phone will:

- Allow numeric messages up to 20 characters in length and text (alpha) messages up to 140 characters in length.
- Accept your messages even if you are unavailable, if your phone is turned off, or if you are busy on another call.
- Alert you of a new text or numeric message, even if you are on another call.
- Store a message if you are making a Private or Group call and deliver it upon completion of the call.
- Store the message if you are outside of the coverage area and deliver it as soon as you are back in a coverage area.
- Attempt continuous delivery of messages until successful, for up to 7 days.
- Refer to text and numeric messages as Text Messages.
- Stamp the message with the time and date the message was left.
- Store up to 16 messages at a time, that will remain until you delete them.

NOTE: “Mail Waiting, Memory Full” displays when 16 message registers are full. (Messages must be erased before you can receive others.)

- Allow for “Auto Call Back” of a phone number that is included within a message, by pressing . If the message contains two phone numbers, Auto Call Back will dial the last number.

Accessing New Messages

When you receive a message, you can view it immediately or later:

Viewing Message Immediately

1	Press  under READ. The message displays.
2	If the message fills more than one screen, use  to scroll through the rest of the message.
3	Press  under SAVE to save the message. Or, Press  under DELETE to delete the message.

Viewing Message Later

Press  under EXIT. The  icon will appear on the Ready screen to remind you that you have a stored message.

Accessing All Messages

1	From the Message Center screen (see “Message Center” on page 86), press  to scroll down to Text Msgs . The number of new messages and the total number of messages are displayed.
2	Press  under SELECT. The Text Msg Inbox screen appears.
3	Press  to scroll to the message you want to read and press  under READ.
4	If the message fills more than one screen, use  to scroll through the rest of the message.

- 5 Press  under SAVE to save the message.
- Or,
- Press  under DELETE to delete the message.

Using Net Alert

With Net Alert, you can send text and numeric messages in any of three ways:

- from your i90c phone
- from a web site provided by your service provider
- from any email application

When you receive a new message:

- Words will display on your phone's display screen indicating that you have a Net Alert message. (The exact words displayed are determined by your service provider.)
- Your phone will alert you every 30 seconds until you dismiss the alert.

If you choose to exit the screen and view the message later, the  icon will appear on the second line of the **Ready** screen to remind you that you have a stored message.

You can view new or stored Net Alert messages at any time by access the Message Center. For more information, see "Message Center" on page 86.

Using Your Phone as a Modem

NOTE: Some features may be network dependent or subscription only, and may not be available in all areas. Contact your service provider for more information.

You can use your i90c phone as a modem for data transfer from your laptop, handheld device, or desktop computer. This is particularly useful when there is no wired phone line (wall jack) available.

You simply attach a data cable (available separately) to your phone and your computer. From that point, your phone is your modem. This allows you to send or receive time-critical information such as email, a field service report, or files. In addition, you can also send or receive faxes.

This type of wireless connection uses one of two types of data connection: circuit-switched data and packet data.

- Circuit-switched data is typically used for sending and receiving faxes and for transferring large files.
- Packet data is used for small file transfers such as email. Closing your phone cover does not interrupt packet data transfers.

To use these services, you must install the iDEN Wireless Data Services software (available separately). For more information on setting up your computer and your i90c phone for Packet and Circuit Data calls, see the *Wireless Data Services User's Guide* and contact your carrier.

TTY Users

You can use your phone and computer in TTY mode. Your computer screen and keyboard replace the standard TTY device. For more information, please see the *Wireless Data Services User's Guide*.

Mobile Originated Text Messaging

Mobile originated text messaging allows you to communicate with other message cable devices to send and receive brief text messages. Received messages appear on your phone display or in your text message inbox.

NOTE: This is a network suppositions dependent feature. Please consult with your service provider for availability.

This document includes:

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Text Message Inbox	Page 97
Quick Notes	Page 98
Text Message Outbox	Page 98
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Memory Storage and the Memory Meter	Page 103

Message Center

The Message Center enables you to access all messaging services through one screen. To access the Message Center:

If MESG is one of your display options:

From the idle screen, press  under MESG.

If MESH is not one of your display options:

1	From the idle screen, press  .
2	Press  to scroll to Messages .
3	Press  under SELECT.

The **Message Center** screen displays the number of messages you have in each message service:

- Voice Mail
- Text Inbox (Text and Numeric Messages)
- Net Alert — *Consult your Service Provider for availability.*
- Quick Notes — user-customizable list of canned messages.
- Text Outbox — contains messages which the phone has sent or is trying to send.
- Drafts Folder — contains messages which the user has composed, but not sent.
- Fax Mail — *Consult your Service Provider for availability.*

NOTE: The Message Center will not display the number of Quick Notes messages that are stored.

NOTE: Drafts Folder will only appear at the Message Center if there is at least one draft message.

To access any message service:

1	From the Message Center screen, press  to scroll to the message service you want to access.
2	Press  under the display option on the right. This option varies depending on the message service selected.

Message Icons

The following icons appears depending on the type of message.

Icon	Description
	Message Sent and Confirmed
	Message Sent Attempted (if this doesn't change to the Message Sent Confirmed icon, resend the message again).
	Message Forwarded
	Message not Received by Addressee
	Message Received by Addressee
	Message Locked
	Message Send Failed
	Message Re-sent

Text Msg Setup

Before you begin sending and receiving messages, you must set up your signature, service center number and expiration information in the **Text Msg Setup** Form.

Accessing Text Msg Setup

1	From the Message Center screen, press  to scroll to Text Inbox , then press  to access the Msg Ctr Menu screen.
2	In the Msg Center Menu screen, the Text Msg Setup field will be highlighted. Press  under SELECT.
3	In the Text Msg Setup screen, Signature is highlighted. Press  under CHNGE. Type in your name (up to 11 characters) which will be your signature. Press  under OK. NOTE: Each time you create a message, you will have to add the signature.
4	From the Text Msg Setup screen, the SrvC Cntr No field will be highlighted. Press  under CHNGE. NOTE: You must use the “+” dialing code and country code as part of the service center number. If the service center number is not preceded by a “+” sign and country code, the message will not be sent successfully. The network will return an error message to the phone. Enter the phone number for the Messaging Service. If you do not know the number, contact your Service Provider.
5	After you have entered the phone number, press  under OK.
6	From the Text Msg Setup screen, the Expire After field will be highlighted. NOTE: The message will only be kept by the SMS Center for the given period until the addressee is reachable. Once the given period expires, the message will be discarded by the SMS Center. If you want to change this setting, press  under CHNGE.
7	In the Expire After screen, press  or press  under --> to change the selection. Press  under DONE when you are finished.

- 8 You will be taken back to the **Text Msg Setup** screen. Press  under **BACK** to save the settings.

Text Message Inbox

The Text Message Inbox allows you to access, manage and create messages.

NOTE: The Inbox memory space can hold 14 messages with a maximum length of 160 characters for each message.

Receiving a Text Message

When you receive a new message, your phone displays New Message and gives an alert.

NOTE: You must set up the text message inbox before you can receive text messages. See "Text Msg Setup" on page 95.

Press  under **READ** to open the message (or your text message inbox if there are multiple messages).

Reading a Message

- 1 From the **Message Center** screen, press  to scroll to **Text Inbox**. Press  under **SELECT**.
- 2 In the Text Message Inbox, **[Create Msg]** is highlighted. Press  to scroll to message that you want to read. Press  under **READ**.
- 3 Once you read the message, you have the choice of saving or deleting the message.

Or,

To see more choices, press  to access the **Inbox Menu** screen.
- 4 In the **Inbox Menu** screen, press  to scroll to your desired choice. Press  under **SELECT**. Follow the prompts for that particular selection.

Quick Notes

Quick Notes are short, pre-written text messages that you can create, edit, and send quickly. The Quick Notes list contains canned text messages that you can use to send messages or replies. You can store up to 20 Quick Notes. Each canned text can have a maximum of 30 characters.

Accessing Quick Notes

- 1 From the **Message Center** screen, press  to scroll to **Quick Notes**. Press  under **SELECT**.
- 2 In the **Quick Notes** screen, **[New Quick Note]** is highlighted. Press  under **CREATE**.
- 3 Type the note that you want to store as a Quick Note. Press  under **STORE**.

Or,

Press  under **BROWSE** to access the **Quick Notes** screen. There is a list of pre-installed notes. Press  to scroll to the desired choice. Press  under **SELECT**.

Then press  under **STORE**. A confirmation screen appears. The **Quick Note** screen returns with the recently stored quick note highlighted.
- 4 Press  to access the **Quick Notes Menu** screen. **Send** is highlighted. Press  to scroll to the desired action. Press  under **SELECT**.

Text Message Outbox

The Text Message Outbox allows you to view and manage outgoing messages. The Outbox items are numbered, with the largest number on top being the most recent item sent and the first item is the **[Create Msg]**. You can:

- Create a text message
- Send a message
- Manage an outbox

NOTE: The Outbox and Drafts Folder share the same memory space and a maximum of 20 messages can be held. If you have reached the maximum, it will be necessary to delete old messages before sending out new messages.

Creating Text Messages

- 1 From the **Message Center** screen, press  to scroll to **Text Outbox**. Press  under **SELECT**.
- 2 In the Text Outbox, **[Create Msg]** is highlighted. Press  under **CREATE**.
- 3 In the **To** screen, type the number of the person that you are sending the message to.

Or,

Press  under **BROWSE** to access the **Search** menu.

You will have the choice to select Recent Calls, Phonebook or Memo to obtain an existing number.

Modify the phone number entry as desired then press  under **OK** when finished.
- 4 In the **Msg** screen, type the message using the alphanumeric keypad. See “Using T9 Text Input” on page 28 for information about entering text into this field.

Or,

Press  under **BROWSE** to access the **Quick Notes** screen. Press  to scroll to the desired message type, then press  under **SELECT**.

If you want to insert your signature, press  to access the **Entry Method** screen. Press  to scroll to **Add Signature**. Press  under **SELECT**.

When you are finished, press  under **OK**.

- 5 If you wish to send your message now, press  under YES.

If you wish to specify the type of message you want to send, request confirmation that your message was sent, save your message as a draft, or delete your message, press  under NO.

To submit a request to confirm delivery of your message, do the following after you have completed the main steps for creating a message but before sending the message:

- 1 From the **New Message** screen, press  to highlight the **Report** field.

- 2 Press  under CHANGE. Press  to scroll to YES. Press  under SELECT.

Or,

With the **Report** field highlighted, press  to scroll to select YES.

To specify the type of message you want to send, do the following after you have completed the main steps for creating a message but before sending the message:

- 1 From the **New Message** screen, press  to highlight the **Send As** field.

- 2 Press  to scroll to the desired message type.

- 3 Press  to access the **New Msg Menu** screen.

The **New Msg Menu** screen returns with the **Send** field highlighted.

To save a message as a draft, do the following after you have completed the main steps for creating a message but before sending the message:

From the **New Message** screen, press  to highlight the **Save as Draft** field, then press  under SELECT.

To delete a message, do the following after you have completed the main steps for creating a message but before sending the message:

From the **New Message** screen, press  to highlight the **Deleted** field, then press  under SELECT. A transient screen appears.

Press  under YES to delete the message. You will be returned to the **Text Msg Outbox** screen.

Sending a Message

- 1 From the **New Msg Menu** screen, with the **Send** field highlighted, press  under SELECT.

Or,

Press  to send the message. A confirmation screen appears. Press  under YES to send the message.

- 2 The message will be sent.

Managing the Outbox

The Text Message Outbox also allows you to manage your messages. You can resend a message that has been previously sent, lock, or delete messages.

Resending a Message

- 1 From the **Text Msg Outbox** screen, press  to scroll the message that you would like to resend, press  to go to the **Outbox Menu** screen.

- 2 The **Outbox Menu** screen appears. Press  to scroll to **Re-send**. Press  under SELECT.

- 3 A confirmation screen appears. Press  under YES to confirm. The message will be sent.

Locking messages from the Outbox Screen

- 1 From the **Text Msg Outbox** screen, highlight the message that you would like to lock, press  to go to the **Outbox Menu** screen.
- 2 The **Outbox Menu** screen appears. Press  to scroll to **Lock**. Press  under SELECT. A confirmation screen appears.

Deleting messages from the Outbox Screen and Read Screens

- 1 From the **Text Msg Outbox** screen, highlight the message that you would like to delete, press  to go to the **Outbox Menu** screen.
- 2 The **Outbox Menu** screen appears with **Delete** highlighted. Press  to scroll to **Delete** the message or scroll to **Delete All** if you want to delete all your messages.

Press  under SELECT.

NOTE: Deleting all messages will only remove those messages that are not locked. You must first unlock the message before you can remove it.

- 3 A confirmation screens appears.

Press  under YES to delete the message.

Or,

Press  under NO. You will be returned to the **Text Outbox** screen.

Drafts Folder

The Drafts Folder contains messages which were created, but not sent either because you wish to send the message at another time or the message is incomplete.

NOTE: Drafts Folder will only appear at the Message Center if there is at least one draft message.

NOTE: The Outbox and Drafts Folder share the same memory space and a maximum of 20 messages can be held. If you have reached the maximum, it will be necessary to delete old messages before sending out new messages.

Accessing the Drafts Folder

- 1 From the **Message Center** screen, press  to scroll to **Drafts Folder**. Press  under SELECT.
- 2 In the **Drafts Folder** screen, **[Create Msg]** is highlighted. Press  under CREATE.
- 3 Follow step 3 through step 5 for “Creating Text Messages” on page 99.
- 4 Press  to scroll to **Save as Draft**. Press  under SELECT. A confirmation screen will appear stating the message has been stored.
- 5 Press  to return to the idle screen.

Editing the Drafts Folder

- 1 From the **Drafts Folder** screen, press  to scroll to the draft that you want to edit. Press  to access the **Drafts Menu** screen. The **Change** field is highlighted.
- 2 If you want to change the draft, press  under SELECT. Press  to scroll to the field that you want to change and follow the prompts or follow step 3 through step 5 for “Creating Text Messages” on page 99.
- 3 Press  to access the **New Msg Menu** screen.

The **New Msg Menu** screen returns with the **Send** field highlighted. Press  to scroll to the desired choice.

Memory Storage and the Memory Meter

Your phone has a specific amount of memory storage and there is a limit on the amount of messages that it can store. You can check to see how much memory your phone has in both the **Text Inbox** and **Text Outbox**.

The Inbox memory space can hold 14 messages with a maximum length of 70-160 characters (depending on language) for each message. The Outbox and Drafts Folder share the same memory space and a maximum of 20 messages can be held.

NOTE: When the SIM card is removed and a new SIM card is inserted, the messages and Quick Notes will be erased to protect the privacy of the user.

Accessing the Memory Meter from Text Inbox

1	From the Message Center screen, press  to scroll to Text Inbox . Press  to access the Msg Center Menu screen.
2	Press  to scroll to Memory Meter . Press  under SELECT.
3	In the Inbox Memory Meter screen, you will see how much memory is available.
4	Press  under BACK to go back to the Message Center screen.

Accessing the Memory Meter from Text Outbox

1	From the Message Center screen, press  to scroll to Text Outbox . Press  to access the Msg Center Menu screen.
2	Press  to scroll to Memory Meter . Press  under SELECT.
3	In the Outbox/Drafts Meter screen, you will see how much memory is available.
4	Press  under BACK to go back to the Message Center screen.

Private and Group Calls

The main topics covered in this section are listed below:

Private Calls	Page 105
Call Alerts	Page 109
Group Calls	Page 113

Private Calls

There are several ways to reach an individual using Private calls:

- Enter the person's Private ID from the keypad.
- Select the person's Private ID from the numbers in your Phonebook.
- Select the person's Private ID from the numbers in your Recent Calls list.
- Use voice-activated dialing.

Whether you dial the person's Private ID directly or use a number stored in your Phonebook or Recent Calls list, you must have the individual's Private ID to use Private calls. To learn how to store names and numbers, see "Phonebook" on page 43.

USER TIP: To find out your own Private ID number, see "My Information" on page 28.

Making a Private Call from the Keypad

1	Enter the Private ID of the person you are trying to call.
2	Press and hold the PTT button on the side of the phone. Begin talking after the phone emits a chirping sound.
3	Release the PTT button to listen.

Making a Private Call from the Phonebook

If you have stored a person's Private ID in your Phonebook, you can use your Phonebook to make a Private call to that person:

1	From the Ready screen, press  .
2	Press  to scroll to Phonebook . Press  under SELECT.
3	From the Phonebook screen, press  to scroll through the names until the desired name is highlighted.
4	Press and hold the PTT button on the side of the phone. Begin talking after the phone emits a chirping sound.
5	Release the PTT button to listen.

Making a Private Call from the Recent Call List

Cover Open

1	From the Ready screen, press  .
2	Press  to scroll to Recent Calls . Press  under SELECT.
3	From the Recent Calls screen, press  to scroll through the names and numbers until the desired name or Private ID is highlighted. If more than one number is stored for an entry, press  until the Private icon  displays.
4	Press and hold the PTT button on the side of the phone. Begin talking after the phone emits a chirping sound.
5	Release the PTT button to listen.

For more information on the Recent Calls list, see “Recent Calls” on page 67.

Cover Closed

- | | |
|---|--|
| 1 | To view your most recent call, press  on the top of your phone. (If the Private icon  appears at the right of the screen, the number is a Private ID.) |
| 2 | Use the volume keys on the side of your phone to scroll to the desired Private ID. |
| 3 | Press and hold the PTT button on the side of the phone. Begin talking after the phone emits a chirping sound. |
| 4 | Release the PTT button to listen. |

Making Private Calls Using Voice-Activated Dialing

If you have recorded a voice name for a Private ID in your Phonebook (see “Voice Names” on page 45), you can use this voice name to call the number.

USER TIP: If you have difficulty making calls using a voice name, try assigning a longer voice name to the number. For example, if the voice name “Joe” fails to place a call to Joe Smith’s number, try assigning the voice name “Joe Smith” to the number.

Cover Open

- | | |
|---|---|
| 1 | From the Ready screen, press and hold  on the top of your phone until the Say Name Now screen appears. |
| 2 | Speaking into the microphone, say the voice name assigned to the Private ID you want to call. |
| 3 | Your phone will play the name back to you. When the entry for the Private ID appears on your screen, press the PTT button. |

Cover Closed

- 1 Press and hold  on the top of your phone until **Say Name** appears.

NOTE: If you do not want to complete the call, press  at any time before the call is placed.

- 2 Speaking into the microphone, say the voice name assigned to the Private ID you want to call.

- 3 Your phone will play the name back to you. When the entry for the Private ID appears on your screen, press the PTT button.

Receiving a Private Call

When you receive a Private call, your phone emits a chirp. If the phone cover is open, **Private in Use**, the caller's Private ID, and the caller's name (if stored in your Phonebook) display on the full-sized screen. If the phone cover is closed, the caller's Private ID or the caller's name (if stored in your Phonebook) display on the one-line screen..

To respond to a Private call:

- 1 Wait for the caller to finish speaking.

- 2 Press and hold the PTT button. Begin talking after the phone emits a chirping sound.

- 3 Release the PTT button to listen.

Storing Private IDs

For information store Private ID to your Phonebook, see “Adding Phonebook Entries” on page 49.

For information on how to quickly store Private ID, see “Storing Phone Numbers and Private IDs Quickly” on page 53.

Call Alerts

You can send a call alert, which lets recipients know that you would like to talk with them. When you send an alert, the recipient will receive a series of beeps and your name or Private ID will appear on the display.

Placing a Call Alert from the Keypad

1	Enter the Private ID of the person you want to call.
2	Press  under ALERT. The Ready to Alert screen displays.
3	Press and hold the PTT button until Alert Successful displays. The recipient's phone sounds the alert intermittently until the user of the phone answers, queues, or clears the alert.

Placing a Call Alert from the Phonebook

1	From the Ready screen, press  .
2	Press  to scroll to Phonebook . Press  under SELECT.
3	From the Phonebook screen, press  to scroll to the Phonebook entry for the person you want to alert.
4	Press  under ALERT. The Ready to Alert screen appears.
5	Press and hold the PTT button until Alert Successful displays. The recipient's phone sounds the alert intermittently until the user of the phone answers, queues, or clears the alert.

Ready to Alert Screen

Ready to Alert is used to confirm your request for the alert and to prompt you to push the PTT button:

- If you press the PTT button, the call alert is sent, and the phone displays the **Recent Calls** screen.

- For call alerts placed from the keypad, pressing  under CANCEL causes the phone to return to the dialing screen with the previously entered number displayed.
- For call alerts placed from the Phonebook, pressing  under CANCEL causes the phone to return to the **Phonebook** screen.
- If you do nothing, the phone will revert to the **Ready** screen.

Receiving Call Alerts

When you receive a call alert, your phone emits a chirp and displays the name or number of the caller. You can answer, queue, or clear the call alert:

- To answer a call alert, press the PTT button.
- To queue a call alert, press  under QUEUE.
- To clear a call alert:
 - Cover open — press  under CLEAR or close phone cover.
 - Cover closed — press .

NOTE: Until you answer, queue or clear the Call Alert, you will not receive any additional phone, Private or Group Calls.

USER TIP: You can turn down the call alert chirp volume by pressing the volume buttons on the side of your phone.

Call Alert Queue

Call alert queuing enables you to save call alerts in a list, or queue. To store a call alert in the call alert queue, press  under QUEUE when you have received an incoming call alert.

Accessing the Call Alert Queue

1	From the Ready screen, press  .
2	Press  to scroll to Call Alert .
3	Press  under SELECT. The Call Alert Queue screen displays.

Viewing Call Alert Date and Time

To find out the date and time a call alert was received:

1	From the Call Alert Queue screen, press  to scroll to the desired call alert.
2	Press  to access Call Alert Menu .
3	Press  to scroll to View .
4	Press  under SELECT .

Sorting Call Alerts

To sort your call alerts by the order they were received:

1	From the Call Alert Queue screen, press  to access Call Alert Menu .
2	Press  to scroll to Sort By .
3	Press  under SELECT .
4	Press  to scroll to First on Top or Last on Top .
5	Press  under SELECT .

Responding to a Call Alert From the Queue

1	From the Call Alert Queue screen, press  to scroll to the call alert you want to respond to. You can respond by sending a call alert or placing a Private call.
2	To send a call alert, press  under ALERT and then press the PTT button. Or, To place a Private call, press the PTT button. The call alert will be removed from the queue.

Deleting a Call Alert From the Queue

To delete a call alert from the queue:

1	From the Call Alert Queue screen, press  to scroll to the entry you want to delete.
2	Press  to access Call Alert Menu .
3	Press  to scroll to Delete .
4	Press  under SELECT.
5	When the confirmation screen appears, press  under YES to delete all call alerts.

To delete all call alerts from the queue:

1	From the Call Alert Queue screen, press  to access the Call Alert Menu .
2	Press  to scroll to Delete All .

- | | |
|---|--|
| 3 | Press  to SELECT. |
| 4 | When the confirmation screen appears, press  under YES to delete the entry. |

Group Calls

In a Group call, you can communicate instantly with a group of people that you have previously set up as a Talkgroup. Group calls go out to all member of the Talkgroup at the same type.

Your sales representative must set up your Talkgroups by providing you with a Talkgroup number for each Talkgroup. After you have the number, you can assign each Talkgroup number a name and store it in your phone (see “Naming a Talkgroup” on page 113). Your phone can store up to 30 Talkgroups.

You can make calls to any of the Talkgroups in your Phonebook at any time. However, to receive calls from a Talkgroup, you must first join that Talkgroup (see “Making Group Calls” on page 114.)

Naming a Talkgroup

- | | |
|---|--|
| 1 | From the Ready screen, press  . |
| 2 | Press  to scroll to Phonebook . |
| 3 | Press  under SELECT. |
| 4 | Press  to scroll to New Entry . |
| 5 | Press  under SELECT. The entry details screen displays. |
| 6 | Enter the information as you would any other Phonebook entry. (See “Adding Phonebook Entries” on page 49.) When you get to Type , make sure that you select the Talkgroup  icon. |
| 7 | Enter the Talkgroup name or number. |
| 8 | When you have completed the entry details, press  under DONE. |

Making Group Calls

You make Group calls just as you would Private call, with a few exceptions:

- when making Group calls from the keypad, press  before entering the Talkgroup number.
- when making Group calls from the Phonebook, scroll to the Talkgroup you want to call.
- when making Group calls from the Recent Calls list or as the most recent call, the Talkgroup icon  indicates a Talkgroup number.
- when you make a Group call, the chirp alerting the recipients and everything you say on the call are heard by all members of the Talkgroup.

Receiving a Group Call

When you receive an incoming Group call, your phone emits a chirp. The Talkgroup number or Talkgroup name you assigned displays on the screen.

To respond to a Group call:

- | | |
|---|--|
| 1 | Wait for the caller to finish speaking. |
| 2 | Press and hold the PTT button. Begin talking after the phone emits a chirping sound. |
| 3 | Release the PTT button to listen. |

Joining a Talkgroup

To receive Group calls from a Talkgroup, you must first join the Talkgroup. You may only belong to one Talkgroup at a time. When you join a new Talkgroup, you no longer belong to your previous Talkgroup.

There are two ways to join a Talkgroup:

Make a Group call to the Talkgroup. This automatically causes you to join the Talkgroup.
--

Or,

- 1 From the **Phonebook** screen, press  to scroll to the name of the Talkgroup you want to call.

Or,

If the Talkgroup you want to join is on your Recent Call list, go to the **Recent Call** screen and press  to scroll to the name of the Talkgroup you want to call.

- 2 Press  under JOIN.

Group-Silent Programming

Group-Silent programming enables you to silence incoming Group alerts and communication.

Turning Group-Silent On or Off

- 1 From the **Ready** screen, press .
- 2 Press  to scroll to **Settings**. Press  under SELECT.
- 3 Press  to scroll to **Tkgrp Settings**. Press  under SELECT.
- 4 With the **Silent** field highlighted, press  under CHANGE.
- 5 Press  to scroll to **On** or **Off**.
- 6 Press  under SELECT.

Datebook

The Datebook is a calendar in your *i90c* phone that enables you to schedule and organize events, such as appointments and meetings. Schedules can be created and viewed for specific days, and reminder alarms can be set so you never miss important events.

You can view upcoming events by week or by day. The Datebook stores and manages 250 events over a 13-month period (12 months ahead and 1 month back).

NOTE: The time and date format and the year used in Datebook can be set by you. Before using Datebook for the first time, ensure that the current year is correct. See “Initial Setup” on page 151 for more information.

This section includes:

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Viewing Your Datebook	Page 118
About Datebook Events	Page 120
Adding New Events	Page 121
Editing Events	Page 125
Deleting Events	Page 125
Datebook Event Reminders	Page 126
Customizing Datebook Set Up	Page 127

Datebook Icons

There are several icons commonly used in the Datebook application:

Symbol	Description
•	Event without a start/end time
>	More options are available
↺	Recurring Appointment
📅	Datebook Alarm
→	Used to move through fields when setting a time and date.

Viewing Your Datebook

To access your Datebook:

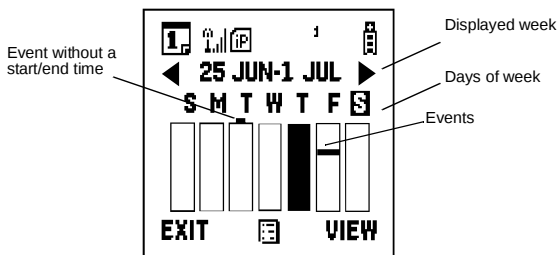
1	From the Ready screen, press  .
2	Press  to scroll to Datebook .
3	Press  under SELECT.

Information in your Datebook can be viewed in three ways: by the week, by the day, or by the event.

This information is structured hierarchically. When you access the Datebook, it displays the current week. You can select a day to view and display the events of that day. When the events of a day are displayed, you can select an event to view and display details of that event.

Viewing a Week

When you access your Datebook, the current week is displayed. You can scroll to other weeks by pressing .



The dates of the displayed week appear at the top of the text area of your phone's screen.

Below the dates are letters indicating the days of the week. When you access your Datebook, the current day is highlighted. You can scroll to other days by pressing .

Below each letter is a 12-hour time window for each day. Scheduled events are shown within the time window in black. Events scheduled outside the 12-hour time window are shown in the day view but not the week view.

A small bar on top of the time window indicates an event on that day that does not have a time of day associated with it, such as a birthday.

Viewing a Day

To view a day in your Datebook:

- 1 With a week displayed, select the day you want to view by pressing  until the letter for that day is highlighted.
- 2 Press  under VIEW.

The day and date appear at the top of the text display area. Events for the day selected are listed by time. Events without times are displayed at the top of the list with a bullet to the left of them.

Viewing Event Details

To view the details of an event:

1	Select and view the day containing the event you want to view.
2	Press  to scroll to the event.
3	Press  under VIEW.

This displays event details such as day of week, time, title, duration, alarm time, and repeat cycle. For more information about events, see “About Datebook Events” on page 120.

Viewing Today

You can easily go to the current day when viewing your Datebook:

1	While viewing any week, day, or event, press  . This displays the Datebook Menu with Go to Today highlighted.
2	Press  under SELECT.

About Datebook Events

Each Datebook event may contain the following information:

- The title you assign to the event. You can enter a title using the phone's alphanumeric keypad or choose from a list of commonly used titles. A title is required for every event (maximum of 128 characters).
- Additional text following the event's title.
- The start time and duration of the event.
- The date of the event.
- An option to repeat the event in your Datebook.
- An alarm to notify you of the event before it begins.
- The style you want your phone to use when the event occurs. See “Styles” on page 159 for more information.

Adding New Events

Using the following instructions, you will enter the information in the order the items appear on the **Event Form** screen. However, you can enter this information in any order by pressing  to scroll through the items on the **Event Form** screen. You can leave any item blank or unchanged by pressing  to scroll past it on the **Event Form** screen. Only a title and a date are required for a valid event.

To cancel a Datebook event entry at any time, press  to return to the **Ready** screen.

To add a Datebook event:

- 1 Access the **Event Form** screen:

While viewing a week in the Datebook, press  to access the **Datebook Menu**. Press  to scroll to **New**. Press  under **SELECT**.

Or,

While viewing a day, press  to scroll to **[New Event]**. Press  under **SELECT**.

The **Event Form** screen displays with the **Title** field highlighted.



The screenshot shows the 'Event Form' screen on a handheld device. At the top, there are status icons for signal strength, battery, and a small '1' indicator. The main form has the following fields: 'Title:' (with a black highlight bar), 'Start:', 'Duration: 1 hour', and 'StartDate: 10/4'. At the bottom, there are two buttons: 'CANCEL' and 'CHANGE'.

- 2 With the **Title** field highlighted, press  under **CHANGE** to access the **Title** screen.

3 Assign a title to the event:

Press  under **BROWSE** to choose from a list of commonly used event titles. Press  to scroll to the title you want and press  under **SELECT**.

Or,

Type the title using the alphanumeric keypad. See “Using T9 Text Input” on page 28 for information about entering text into this field.

You can also enter a description of the appointment or any other text.

When you are finished, press  under **OK**.

The **Event Form** screen returns with the **Start** field highlighted.

4 If you want to assign a time of day to the event:

With the **Start** field highlighted, press  under **CHANGE**.

From the **Start** screen, enter the time the event will begin.

Type in the start time, or press  to scroll through the hours, minutes, and am, pm, or 24 hour clock. Press  or press  under  to move through the fields.

Press  under **DONE**.

The **Event Form** screen returns with the **Duration** field highlighted.

5 After you have assigned a start time to the event, you can specify the duration of the event. The default duration is one hour. To assign a different duration:

With the **Duration** field highlighted, press  under **CHANGE**.

From the **Duration** screen, press  to scroll to the desired duration. If you select **None**, the event will have a duration of zero minutes.

Press  under **SELECT**.

The **Event Form** screen returns with the **StartDate** field highlighted.

- 6** The default date assigned to an event is the day that was highlighted when you accessed the **Event Form** screen to add the event. To assign a different date:

With the **StartDate** field highlighted, press  under CHANGE.

From the **StartDate** screen, enter the date of the event:

Type in the date, or press  to scroll through the months, days, and years. Press  or press  under → to move through the fields.

Press  under DONE.

The **Event Form** screen returns with the **Repeat** field highlighted.

- 7** If you want the event to recur in your Datebook, assign a repeat cycle to it:

With the **Repeat** field highlighted, press  under CHANGE.

From the **Repeat** screen, press  to scroll to the desired repeat cycle. Press  under SELECT.

(If your appointment recurs more than one day a week, scroll to **Multiple Days** and select as many days as apply. Then press  under DONE.)

The **Event Form** screen returns with the **RepeatEnd** field highlighted.

NOTE: When Repeat is set to none or yearly, it will not be possible to access the RepeatEnd field.

Press  under CHANGE and enter the date on which you want the event to stop repeating. When you have finished, press  under DONE.

The **Event Form** screen returns with the **Alarm** field highlighted.

- 8 If you want to set an alarm to remind you that the event is approaching:

With the **Alarm** field highlighted, press  under CHANGE.

From the **Alarm** screen, press  to scroll to the desired alarm option.

Press  under SELECT.



- 9 If you want your phone to change to a style you have defined when the event occurs (see “Styles” on page 159):

With the **Styles** field highlighted, press  under CHANGE.

From the **Style** screen, press  to scroll to the desired style.

Press  under SELECT.



- 10 When you have entered all the desired information about the event, press  under DONE.



Editing Events

- 1 If you are viewing the week containing the event:
Press  under EDIT.
Or,
If you are viewing the day containing the event:
Press  to display the **Datebook Menu**.
Press  to scroll to **Edit** and press then  under SELECT.
- 2 Follow the applicable instructions in “Adding New Events” on page 121, to edit the various fields.

Deleting Events

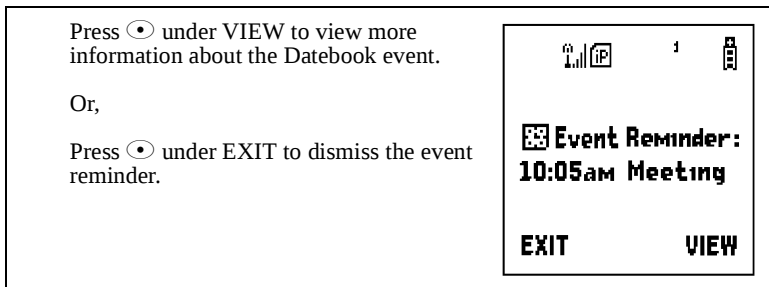
- 1 View the day containing the event and press  to scroll to the event you want to delete.
Or,
View the details of the event you want to delete.
- 2 Press . The **Datebook Menu** displays.
- 3 Press  to scroll to **Delete** and press  under SELECT.
- 4 If the event is a recurring event, the **Delete Event** screen appears:
 - To delete only the occurrence of the event you select in step 1, leave **This Event Only** highlighted.
 - To delete all occurrences of the event, press  to highlight **Repeat Events**.
 Press  under SELECT.
- 5 If the event is a recurring event, a confirmation screen appears. Press  under YES to confirm.

Datebook Event Reminders

If you have set an alarm to remind you that a Datebook event is approaching, your phone sounds an audible alarm and displays a reminder.

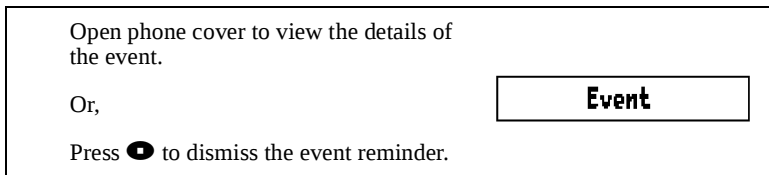
Cover Open

When a Datebook event reminder appears on the full-sized screen:



Cover Closed

When a Datebook event reminder appears on the one-line screen:



Customizing Datebook Set Up

Datebook allows you to customize some of its set up features:

- **DailyBegin** — sets the beginning time of the 12-hour day your Datebook displays when you are viewing a week.
- **Reminder** — controls the behavior of alarms you have set in Datebook:
 - **Active Only** sets Datebook to ignore alarms that occur when your phone is powered off.
 - **Delayed If Off** sets Datebook to delay alarms that occur when your phone is powered off until your phone is next powered on.
- **Weekday** — sets the first day of the week your Datebook displays when you are viewing a week.
- **DeleteAfter** — controls how long your Datebook waits to delete an event after it has occurred.

To customize your Datebook set up:

1 While viewing a week in the Datebook, press  to access the **Datebook Menu**.

2 Press  to scroll to **Setup** and then press  under SELECT.

3 Press  to scroll to any of the set-up features.

Press  under CHANGE.

Use the screens that appear to make your changes.

Memo

The Memo application provides you with a place to store a numeric note in your i90c phone.

This section includes:

Adding a New Memo	Page 129
Viewing a Memo	Page 129
Editing a Memo	Page 130
Deleting a Memo	Page 130

Adding a New Memo

- 1 From the **Ready** screen, press .
- 2 Press  to scroll to **Memo**.
- 3 Press  under SELECT. The **Memo** screen displays.
- 4 Type your numeric memo using the phone's keypad.
- 5 Press  under STORE.

Viewing a Memo

- 1 From the **Ready** screen, press .
- 2 Press  to scroll to **Memo**.
- 3 Press  under SELECT.

Editing a Memo

1	From the Ready screen, press  .
2	Press  to scroll to Memo .
3	Press  under SELECT.
4	Type the new number. You can delete a digit by pressing  under DELETE. To all the digits, press and hold  under DELETE.
5	Press  under STORE.

Deleting a Memo

1	From the Ready screen, press  .
2	Press  to scroll to Memo .
3	Press  under SELECT.
4	Press and hold  under DELETE.
5	Press  under STORE.

Voice Record

The Voice Record feature of your *i90c* phone enables you to record and play back personal messages or the incoming portion of phone calls on your *i90c* phone.

This section includes:

About Voice Record	Page 131
Accessing Voice Record	Page 131
Recording a Voice Record	Page 132
Playing a Voice Record	Page 132
Adding to a Voice Record	Page 133
Labeling a Voice Record	Page 133
Deleting a Voice Record	Page 134
Locking/Unlocking a Voice Record	Page 134
Voice Record Memory	Page 135

About Voice Record

Your phone can store up to 20 Voice Record messages, with a total time of about three minutes, depending on available memory.

Accessing Voice Record

To access the Voice Record feature:

- | | |
|---|---|
| 1 | From the Ready screen, press  . |
| 2 | Press  to scroll to VoiceRecord . |
| 3 | Press  under SELECT . |

Recording a Voice Record

NOTE: Recording of phone calls is subject to varying State and Federal laws regarding privacy and recording of phone conversations.

To record a personal message as a Voice Record:

1	From the VoiceRecord screen, press  to scroll to [New VoiceRec] .
2	Press  under RECORD and speak the message you want to record into the microphone.
3	When you are finished recording your Voice Record, press  under STOP.

To record the incoming portion of a call as a Voice Record:

1	While on an active call, press  .
2	Press  to scroll to Record .
3	Press  under SELECT to record the incoming portion of the call. Your own voice will not be recorded.
4	When you are finished recording your Voice Record, press  under STOP.

Playing a Voice Record

1	From the VoiceRecord screen, press  to scroll to the Voice Record you want to play.
2	Press  under PLAY.
3	To stop the Voice Record while it is playing, press  under BACK or close phone cover.

Adding to a Voice Record

After you create a Voice Record, you can record more at the end of the existing Voice Record:

1	From the VoiceRecord screen, press  to scroll to the Voice Record you want to add to.
2	Press  to view the VoiceRecord Menu .
3	Press  to scroll to Add To .
4	Press  under SELECT and speak the message you want to record into the microphone.
5	When you are finished recording, press  under STOP.

Labeling a Voice Record

When you create a Voice Record, it is labeled with the time and date it was recorded. After a Voice Record has been recorded, you can re-name it with a custom label.

To label a Voice Record:

1	From the VoiceRecord screen, press  to scroll to the Voice Record you want to name.
2	Press  to view the VoiceRecord Menu .
3	Press  to scroll to Label and press  under SELECT.
4	At the Enter Label screen, enter a label for the Voice Record using the alphanumeric keypad.
5	Press  under OK.

Deleting a Voice Record

To delete a Voice Record:

1	From the VoiceRecord screen, press  to scroll to Voice Record you want to delete.
2	Press  to view the VoiceRecord Menu .
3	Press  to scroll to Delete and press  under SELECT.
4	A confirmation screen appears. Press  under YES to confirm.

To delete all unlocked Voice Records:

1	From the VoiceRecord screen, press  to view the VoiceRecord Menu .
2	Press  to scroll to Delete All and press  under SELECT.
3	A confirmation screen appears. Press  under YES to confirm.

Locking/Unlocking a Voice Record

Locking a Voice Record prevents it from being deleted. When a Voice Record is locked, the locked icon  appears next to it.

To lock or unlock a Voice Record:

1	From the VoiceRecord screen, press  to scroll to Voice Record you want to lock or unlock.
2	Press  to view the VoiceRecord Menu .
3	Press  to scroll to Lock or Unlock .
4	Press  under SELECT.

Voice Record Memory

Typically, you can store 20 Voice Records with a total time of about three minutes. To check the amount of memory available for a Voice Record:

1 From the **VoiceRecord** screen, press  to view the **VoiceRecord Menu**.

2 Press  to scroll to **Memory**.

3 Press  under SELECT to display the **Memory Meter** screen.

The memory meter shows the amount of Voice Record memory space currently in use. It fills in from left to right as your Voice Record memory space fills up.

4 From the **Memory Meter** screen, you can free more Voice Record memory space by pressing  under DELETE to delete all unlocked Voice Record.

A confirmation screen displays. Press  under YES to confirm.

NOTE: Voice Records, Java application data, and ring styles share the same memory space on your phone. Using a large amount of memory to store Java application data or ring styles reduces the space available for Voice Records. You can create more memory space to store Voice Records by deinstalling stored Java applications (see “Java Memory” on page 139) or deleting some ring styles (see “Ring Styles” on page 145).

Java

The Java feature of your *i90c* phone runs programs, or applications, written in the Java 2 Micro Edition programming language.

The phone comes with Java applications downloaded and ready for installation.

You can choose to order or purchase Java applications and download them into your phone via the Internet. For more information, see “Suspending a Running Application” on page 138.

This section includes:

Running Java Applications	Page 137
Suspending a Running Application	Page 138
Installing Java Applications	Page 139
Java Memory	Page 139
Deinstalling Java Applications	Page 140

IMPORTANT:	To avoid personal injury, do not play games on your <i>i90c</i> phone when operating machines or driving vehicles.
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Running Java Applications

To access the Java applications:

- | | |
|----------|---|
| 1 | From the Ready screen, press  . |
| 2 | Press  to scroll to Java . |
| 3 | Press  under SELECT. |

The **Java** screen displays all your Java applications.

To run an application:

- 1 From the **Java** screen, press  to scroll to the application you want to run.

NOTE: If an application has not been installed, **INSTALL** appears as the right display option when the application is highlighted. See “Installing Java Applications” on page 139 for information about installing applications.

- 2 Press  under **SELECT**.

- 3 Press  under **RUN**.

Suspending a Running Application

Press  or close the phone cover.

NOTE: Closing the phone cover will return you to the Ready screen.

Resuming a Suspended Application

Cover Open

Press  under **RESUME**.

Cover Closed

- 1 Open phone cover. The **Ready** screen displays.

- 2 Press .

- 3 Press  to scroll to **Java**.

- 4 Press  under **SELECT**.

- 5 Press  under **RESUME**.

Downloading Java Applications

You can customize your phone by connecting your phone to a PC using a data cable and downloading additional Java applications or by downloading applications over the air without a data cable.

Please go to www.motorola.com/idenupdate for a selection of applications and downloading instructions.

Installing Java Applications

Before running a Java application you have downloaded, you must install it.

To install a Java application:

- 1 From the **Java** screen, press  to scroll to the application that you want to install.

NOTE: If an application has already been installed, **SELECT** appears as the right display option when the application is highlighted. If an application has not been installed, **INSTALL** appears as the right display option.

- 2 Press  under **INSTALL**.

- 3 When your phone has finished installing the application, press  under **DONE**.

Java Memory

If you want to use custom Java applications in your phone, you must have enough memory in your phone to store and run the custom application you want.

To check how much memory your phone has available for Java applications:

- 1 From the **Java** screen, press  to scroll to **Java System**.

- 2 Press  under **SELECT**.

- 3 Press  under **NEXT**.

- 4 To see more memory information, press  under **NEXT** again.

The screens displayed show how much **Data** and **Program** memory your phone has free:

- **Data** refers to the memory used to store application data, such as image files.
- **Program** refers to the memory used to store application code.

Deinstalling Java Applications

To remove a Java application from your phone:

1	From the Java screen, press  to scroll to the application you want to remove.
2	Press  .
3	Press  to scroll to DEINSTALL .
4	Press  under SELECT.
5	A confirmation screen displays. Press  under YES.
6	When your phone has finished deinstalling the application, press  under DONE.

NOTE: Java application data, Voice Records, and ring styles share the same memory space on your phone. Using a large amount of memory to store Java application data or ring styles reduces the space available for Voice Records. You can create more memory space to download Java applications by deleting stored Voice Records (see “Deleting a Voice Record” on page 134), or ring styles (see “Ring Styles” on page 145).

Customizing the i90c Phone

You can customize your i90c phone to fit the way you want to use it.

The phone's Settings menu enables you to control many of the phone's features and functions, including display properties, message handling, and security features.

The Styles feature enables you to group screen display, ring, and call answering features together and save them for quick and easy access.

The Shortcuts feature enables you to access most menu or submenu options in your phone by pressing a numeric button on the keypad.

This section includes:

Settings Menu	Page 141
Styles	Page 159
Shortcuts	Page 164

Settings Menu

Using the Settings menu, you can set or change a wide variety of your phone's features.

To access the Settings menu:

1	From the Ready screen, press  .
2	Press  to scroll to Settings .
3	Press  under SELECT.

NOTE: Changes to your phone Settings will not take effect if there is an active style. Styles must be set to Off. See "Turning Off a Style" on page 162.

From the **Settings** screen, you can access these Settings options:

- **Ring/Vibe** — controls how your phone rings or vibrates when you receive calls and messages.
- **Phone Setup** — sets call-answering features, chooses which phone line is used, and sets your network ID.
- **In-Call Setup** — sets call timer, message notification, and call waiting features.
- **Security** — sets security features including phone lock, keypad lock, and SIM PIN.
- **Personalize** — controls which features are most accessible when you turn on your phone.
- **Initial Setup** — sets a variety of display features including the language displayed, the size of the characters on the full-sized display screen, screen contrast, time and date formats, current year, backlight, status light, and scrolling. Also turns auto redial on or off and sets baud rate.
- **VoiceVolume** — sets the volume of your phone's earpiece and speaker.
- **Tkgrp** — sets certain Talkgroup options.
- **Service Status** — shows the status of your phone's services.

To access any of these options:

- | | |
|---|--|
| 1 | From the Settings screen, press  to scroll to the option you want to access. |
| 2 | Press  under SELECT. |

Many of these options have other options within them. Press  to scroll through the lists of options, and press  to select and modify options and the features, according to the instructions on your phone's screen. For some options, you can also press  to select sub-options.

In screens that show lists of options for a setting, a check mark to the left of the option indicates the current option for the setting.

Ring/Vibe

Ring/Vibe enables you to control how your phone rings and vibrates when you receive calls and messages. You can set ring volume, choose ring styles, and use the VibraCall® Alert feature which enables you to set your phone to alert you to calls and messages by vibrating.

www.motorola.com/iden

You can customize your phone by downloading additional musical ring tones. Please go to www.motorola.com/idenupdate for a selection of musical ring tones and downloading instructions.

Main Options

Ring/Vibe provides these main options:

- **Ringer Vol** — sets ring volume.
- **Keypad Vol** — sets volume of sounds associated with keypad actions.
- **Mail Vol** — sets volume of Text Message, Voicemail, and Net Alert notifications.
- **Java/Data Vol** — sets volume of sounds made by Java applications.
- **Headset** — choosing the **HdsetOnly** option prevents sound from being emitted from the phone's speaker when the headset is being used.
- **VibeAll** — choosing **On** sets the phone to vibrate for all calls, messages, and alerts; choosing **Off** enables you set the type of notification for each of these features.

Ring Style and Notification Type

When you set **VibeAll** to **On**, your phone vibrates to notify you of all types of calls, messages, and alerts.

When you set **VibeAll** to **Off**, the following features display after **VibeAll** on the **Ring/Vibrate** screen, enabling you to set notification options for each:

- **Line 1** — sets the ring style and type of notification for calls on Line 1.
- **Line 2** — sets the ring style and type of notification for calls on Line 2.
- **Pvt/Grp** — sets type of notification for Private and Group calls.
- **Call Alert** — sets the ring style and type of notification for call alerts.
- **Text Msgs** — sets type of notification for Text Messages.
- **Reminders** — sets type of notification for Datebook reminder alarms.
- **Voicemail** — sets type of notification for voice mail messages.
- **Net Alert** — sets type of notification for Net Alert messages.

To set **VibeAll** to **Off** or **On**:

1	From the Ring/Vibrate screen, press  to scroll to VibeAll .
2	Press  under CHANGE.
3	Press  to scroll to Off or On .
4	Press  under SELECT.

Or:

With the phone cover closed, use the volume buttons to set **VibeAll** to **Off** or **On**. Increasing the volume sets **VibeAll** to **Off**. Decreasing the volume as much as possible sets **VibeAll** to **On**.

The following icons appear on your display screen to indicate the options you have chosen:

Icon	Indicates...
	Vibrate All - phone is set to vibrate when you receive all types of calls, messages, and alerts; the VibeAll option is On .
	Vibrate On - phone is set to vibrate when you receive phone calls.
	Vibrate Then Ring - phone is set to vibrate and then ring when you receive phone calls.
	Silent - phone is set not to ring.

Notification Types

When you set a notification type, you have these options:

- **Ring** — the phone rings to notify you.
- **Vibe** — the phone vibrates to notify you.

- **Vibe/Ring** — the phone vibrates and then rings to notify you. This option is only available for calls on Line 1 and Line 2.
- **Silent** — the phone does not ring to notify you.

To set a notification type:

1	From the Ring/Vibrate screen, ensure that VibeAll is set to Off . Then press  to scroll to any of the features on the Ring/Vibrate screen after VibeAll .
2	Press  under SELECT.
3	With the Type field highlight, press  under CHANGE.
4	Press  to scroll to the notification type you want to assign to the feature.
5	To assign the notification type, press  under SELECT.

Ring Styles

When you set a ring style, you can choose from many pre-set ring styles, including musical tones.

You can customize your phone by downloading additional musical ring tones. Please go to www.motorola.com/idenuupdate for a selection of musical ring tones and downloading instructions.

To set a ring style:

1	From the Ring/Vibrate screen, ensure that VibeAll is set to Off . Then press  to scroll to any of the features that allow you to set a ringer style: Line 1 , Line 2 , or Call Alert .
2	Press  under SELECT.
3	With the Style field highlighted, press  under CHANGE. As you highlight each ring style, that ring style will play.
4	Press  to scroll to the ring style you want to assign to the feature.
5	To assign the ring style, press  under SELECT.

You may want to make more room in your phone's memory by deleting some ring styles.

NOTE: If a ring style is deleted from your phone's memory, it is removed from your list of ring style options. You can no longer assign the ring style to a feature unless you download the ring style again.

To delete a ring style from your phone's memory:

1	From the Ring/Vibrate screen, ensure that VibeAll is set to Off . Then press  to scroll to any of the features that allow you to set a ringer style: Line 1 , Line 2 , or Call Alert .
2	Press  under SELECT .
3	With the Style field highlighted, press  under CHANGE .
1	Press  to scroll to the ring style you want to delete from your phone's memory. If menu icon  appears while the ring style is highlighted, you may delete the ring styles.
2	Press  .
3	If you want to delete only the ring style you highlighted, confirm that Delete is highlighted. If you want to delete all deletable ring styles, press  to scroll to Delete All .
4	Press  under SELECT .

NOTE: Ring styles, Voice Records, and Java application data share the same memory space on your phone. Using a large amount of memory to store Java application data or Voice Records reduces the space available for ring styles. You can create more memory space to store ring style by deinstalling stored Java applications (see "Java Memory" on page 139) or deleting some Voice Records (see "Deleting a Voice Record" on page 134).

Phone Setup

Phone Setup sets some basic phone features. Access Phone Setup to set the following options:

- **Line** — enables you to choose Line 1 or Line 2 as the active line for outgoing calls.

- **AutoAns** — sets your phone to automatically answer an incoming call after a specified number of rings. When this feature is turned on, the phone answers by connecting you to the caller; it does not send the call to Voicemail, unless you are out of coverage or on another call.
- **Any Key** — when turned on, enables you to answer calls by pressing any key on the alphanumeric keypad.
- **Network ID** — enables you to set the phone's network IDs and their roaming options. Do not alter Network ID unless directed to do so by your service provider.

In Call Setup

In Call Setup sets the in-call timer, message notification, and call waiting features.

- The **In Call Timer** option turns the following features on and off:
 - **Display** — the duration of each call displays on the phone's screen when the call ends.
 - **Minute Beep** — an audible beep occurs every minute of an active call.
- The **Notifications** option controls message notification during calls:
 - **Receive All** — notifies you of all types of messages during calls.
 - **Msg Mail Only** — notifies you of mail messages only; all other types of message notifications are delayed until the call has ended.
 - **Delay All** — delays notification of all messages until the call has ended.
- **Call Waiting** — enables you to turn off call waiting for the next call. After you end the call, call waiting is turned back on.

Security

Security allows you to set security features:

- **Phone Lock** — sets an optional code that locks your phone.
- **Keypad Lock** — displays instructions for locking and unlocking your phone's keypad.
- **SIM PIN** — enables and disables your phone's SIM PIN requirement.
- **New Passwords** — enables you to change your phone's security code, phone unlock code, and SIM PIN.

- **Master Reset** — allows your service provider to reset your service in the event of a security or provisioning problem.

Using Phone Lock

The Phone Lock feature enables you to prevent your phone from being used unless an Unlock code is typed into the keypad.

The Unlock code is required to enable the phone lock feature, to unlock the phone, and to set a new Unlock code. Contact your service provider for your default Unlock code.

Phone lock provides two options for locking the phone:

- **Lock Now** locks the phone immediately after you set the option.
- **Auto Lock** locks the phone the next time the phone is powered on.

Setting Keypad Lock

Choosing the Keypad Lock option displays instructions for locking and unlocking your phone's keypad. See "Keypad Lock" on page 26 for more information on locking the keypad.

Enabling and Disabling SIM PIN

The SIM PIN option enables and disables the feature that requires a SIM PIN code to be typed into the phone to access the information on the SIM card and to make or receive calls. See "SIM Card Personal Identification Number (PIN)" on page 18 for more information.

Setting New Passwords

The New Passwords option enables you to set three types of passwords that control access to your phone:

- **Unlock Code** — this code is used to control access to the phone using Phone Lock. It is also required to access the Master Clear and Feature Reset features. If you want to use any of these features, contact your service provider for your default Unlock code.
- **Security Code** — this code is used to access the Master Reset feature under the direction of your service provider. It can also be used to override your Unlock code under the direction of your service provider.
- **SIM PIN** — this code is used to access the information on your SIM card and to make or receive calls.

Using Master Reset

The Master Reset option is provided for use only under the direction of your service provider. It resets your service.

Personalize

Personalize contains options that control which major features are easiest to access when you turn on your phone:

- **Main Menu** — changes the order of the items on your main menu.
- **Keys** — controls which main menu items appear above the two option keys on the **Ready** screen.
- **Power Up App** — sets any of the programs on the main menu to run when you turn on your phone.

Reordering Main Menu

1	From the Personalize screen with Main Menu highlighted, press  under SELECT to access the Reorder Menu screen.
2	Press  to scroll to the main menu option you want to move.
3	Press  under GRAB.
4	Press  to move the option up or down in the list.
5	When the item is where you would like it to appear in the main menu, press  under INSERT.
6	Repeat step 2 through step 5 for all main menu items you want to move.
7	Press  under DONE.

Changing Ready Screen Options

Two options from the main menu always appear on your **Ready** screen above the left and right option keys. Each option can be accessed by pressing the corresponding option key.

Your phone arrives with Phonebook (PHBK) assigned to the left option key and Messages (MSG) assigned to the right option key (◉). You can assign any Main Menu option you want to the option keys.

1	From the Personalize screen, press ◂ to scroll to Keys .
2	Press ◉ under SELECT. The Keys screen shows the option assigned to each option key (Left and Right).
3	To change the option assigned to the left option key, press ◉ under CHANGE while Left is highlighted.
4	Press ◂ to scroll to the option you want to assign to the left option key.
5	Press ◉ under SELECT.
6	To change the option assigned to the right option key, press ◂ to highlight Right and press ◉ under CHANGE. Repeat steps 4 and 5 for the right option key.

Changing Power-Up Program

Your phone is set to display the full-sized screen when it is powered on. You can set the phone to display the main screen of any main menu option when it is powered on.

1	From the Personalize screen, press ◂ to scroll to Power Up App .
2	Press ◉ under SELECT. The Power Up App screen shows the name of the program or screen that currently appears when the phone is powered on.
3	Press ◉ under CHANGE.
4	Press ◂ to scroll to the option you want to appear when the phone is powered on.
5	Press ◉ under SELECT.

Initial Setup

Initial Setup enables you to control a variety of your phone's features that you may want to modify when you first get your phone:

- **Time/Date Format** — sets the format in which the time and date display on your phone.
- **Year** — sets the current year.

NOTE: Changing the current year may affect stored Datebook events. Datebook stores events 12 months ahead and one month after the current date. Events outside this range will be deleted. See "Datebook" on page 117 for more information.

- **Auto Redial** — turns the automatic redial feature on and off.
- **Backlight** — controls how long your phone's backlight stays on.
- **Sensor** — controls the photosensor to activate the backlight when your phone is in poor lighting conditions.
- **Status Light** — controls whether the status light is on when the phone is on.
- **Display** — controls the size of the text in the full-sized display screen.
- **Contrast** — sets the display contrast lighter or darker.
- **Scroll** — sets how you can scroll lists and menus.
- **Flip Activation** — controls whether opening and closing your phone's cover answers and ends calls.
- **Language** — sets the language that your phone displays.
- **Master Clear** — returns all settings to their defaults and erases all Styles and stored lists. Use only under the direction of your service provider.
- **Feature Reset** — returns all settings to their original defaults. Use only under the direction of your service provider.
- **Baud Rate** — sets the baud rate at which your phone communicates with a laptop computer, PC, or any other device connected to your phone's bottom connector.
- **TTY Setup** — sets TTY options. By default, your phone is set to function with a TTY device.
- **TTY Baud Rate** — sets the baud rate at which your phone communicates when connected to a TTY device.
- **Alert Timeout** — controls the amount of time the Call Alert tone sounds.

- **Return to Home** — controls how long the Recent Calls screen displays before returning to the Ready screen after phone and private/group conversations.

Changing Time and Date Format

Your phone displays times in 12-hour-clock format (12:00 am through 11:59 pm) or 24-hour-clock format (0:00 through 23:59). It displays dates in month/day format or day/month format.

NOTE: If you turn the time and date display off, no times are associated with calls on your Recent Calls list or Voice Notes, and the alarm feature of your Datebook is disabled.

To set the time and date format, or turn time and date display on or off:

- 1 From the **Initial Setup** screen with **Time/Date Format** highlighted, press  under **SELECT** to access the **Time/Date Format** screen.
- 2 To change the time format:

With **Time Format** highlighted, press  under **CHANGE** to access the **Time Format** screen.

Press  to highlight the time format you want.

Press  under **SELECT**.
- 3 To change the date format:

Press  to highlight **Date Format**, and press  under **CHANGE** to access the **Date Format** screen.

Press  to highlight the date format you want.

Press  under **SELECT**.
- 4 To turn the time and date format on or off:

Press  to highlight **Display**, and press  under **CHANGE** to access the **Display** screen.

Press  to choose **Off** or **On**.

Press  under **SELECT**.

Setting Auto Redial

When Auto Redial is set to **On**, if you receive a **System Busy** or **Try Later** message while making a call, the phone will redial the number automatically. You will hear a ring-back tone when a successful call is placed.

When Auto Redial is set to **Off**, you must press and hold  to redial the last number dialed.

Setting Backlight Timer

When you use your phone on battery power, the backlight illuminates the display when you receive or make calls. You can set the amount of time that the backlight stays on to 5, 10, 20, or 30 seconds, or set it to stay on continuously or stay off at all times.

- 1 From the **Initial Setup** screen, press  to scroll to **Backlight**.
- 2 Press  under CHANGE.
- 3 Press  to scroll to the desired backlight option.
- 4 Press  under SELECT.

NOTE: Setting the backlight to stay on continuously may decrease the amount of time you can use your phone before recharging the battery.

IMPORTANT:

Setting the backlight to stay on continuously may degrade backlight brightness over time.

Setting Photosensor

To conserve battery power, the photosensor will disable the backlight when you are in good lighting conditions. To force the backlight to come on every time a key is pressed, you can turn the photosensor off.

NOTE: Turning the Photosensor to OFF will force the backlight to come on every time a key is pressed and will drain your battery power.

- 1 From the **Initial Setup** screen, press  to scroll to **Sensor**.
- 2 Press  under CHANGE.

3	Press  to scroll to the desired option.
---	--

4	Press  under SELECT.
---	---

Adjusting Status Light

The status light is at the top right side of the phone, near the cover hinge. It illuminates when the phone is on. You can turn the status light feature on or off from the **Initial Setup** screen.

Setting Text Display

The text display option controls the size of the text displayed on your phone's full-sized display screen. You can set the screen to show more text using smaller characters or less text using larger characters. The size and amount of text displayed depends on the view selected:

- **Standard view** — five lines of text, 14 characters per line.
- **Compressed view** — seven lines of text, 18 characters per line.
- **Zoom view** — four lines of text, 11 characters per line.

To set the text display view:

1	From the Initial Setup screen, press  to scroll to Display .
---	---

2	Press  under CHANGE.
---	---

3	Press  to scroll to the desired display option.
---	--

4	Press  under SELECT.
---	---

NOTE: Unless otherwise noted, illustrations in this User's Guide depict **Standard view**.

Setting Scrolling

You can set your phone to scroll through menus and lists in either of two ways:

- **Up/Down** — when you reach the bottom or top of a list or menu scrolling stops until you scroll in the other direction.

- **Wrap Around** — when you reach the bottom or top of a list or menu, scrolling “wraps” around and continues at the other end of the lists of menu.

You can set the scrolling style from the **Initial Setup** screen using the **Scroll** option.

Setting Flip Activation

When Flip Activation is set to **On**, opening your phone’s cover answers incoming calls and closing the cover ends calls.

When Flip Activation is set to **Off**, opening or closing your phone’s cover does not answer or end calls. To answer a call, you must press  on the top of your phone, or press  or any key on the keypad, or press  under YES. To end a call, you must press  on the top of your phone or  on the keypad.

Changing Display Language

You can customize the i90c phone to display menus in English, French, Spanish, or Portuguese. The default language is English.

To change the display language:

1	From the Initial Setup screen, press  to scroll to Language .
2	Press  under CHANGE.
3	Press  to scroll to the language you want your phone to display.
4	Press  under SELECT.

Master Clear

Master Clear returns all of your phone's settings back to the original factory default settings. Use only under the direction of your service provider.

Feature Reset

Feature Reset returns all your phone’s settings to their defaults. To use this feature, you must contact your service provider to receive your phone’s Unlock code.

Setting Baud Rate

You can set your phone's baud rate from the **Initial Setup** screen. Scroll to the **Baud Rate** option and then choose the baud rate you want, or choose **Auto** to set your phone to automatically choose the appropriate baud rate.

Setting TTY Mode

NOTE: This feature may not be offered by your service provider.

TTY Setup enables you to set your options for using your phone with a teletypewriter (TTY) device. By default, your phone is set to function with a TTY device in TTY mode.

Your phone supports the following TTY modes:

- **TTY** — for calls in which you type and read text on your TTY device.
- **VCO** (Voice-Carry-Over) — for calls in which you speak into your phone and read text replies on your TTY device.
- **HCO** (Hearing-Carry-Over) — for calls in which you type text on your TTY device on listen to voice replies on your phone's speaker.

You can set your TTY mode using your phone's **Settings** menu at any time, or by issuing commands from your TTY device while on an active call.

To set your phone's TTY mode using your phone's **Settings** menu:

1	From the Initial Setup screen, press  to scroll to TTY Setup .
2	Press  under CHANGE .
3	Press  to scroll to the desired TTY mode; Off , TTY , VCO , or HCO .
4	Press  under SELECT .

To set your phone's TTY mode from your TTY device, issue one of the following commands while on an active call:

- “VCO please” — to select VCO mode.
- “HCO please” — to select HCO mode.
- “HCO off please” — to turn off HCO mode.

IMPORTANT:	When you are using HCO, the sound coming from your phone speaker may be uncomfortably loud. Use caution when putting the phone to your ear. (For information on setting your phone's speaker volume, see “VoiceVolume” on page 158.)
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NOTE: TTY device manufacturer's proprietary feature such as Turbo-Code, High-Speed, and Interruption are not supported by your phone. These features must be turned off or disabled to use your TTY device with your phone.

Setting TTY Baud Rate

NOTE: This feature may not be offered by your service provider.

By default, your phone's TTY baud rate is set to 45.45, the baud rate required for TTY calls within the US. To make calls outside the US, set your TTY baud rate to 50.0.

To change the TTY baud rate:

1	From the Initial Setup screen, press  to scroll to TTY Baud .
2	Press  under CHANGE .
3	Press  to scroll to the baud rate for your location.
4	Press  under SELECT .

Setting Alert Timeout

When you receive a voice mail message, a Text Message, or a Net Alert, your phone sounds an alert tone every 30 seconds until you view or dismiss the message. Alert Timeout sets the amount of time your phone continues to sound these alert tones.

You can set your phone to sound alert tones for 1 minute, 5 minutes, 15 minutes, 30 minutes, or 1 hour, or to continue to alert you for an unlimited amount of time, or to never sound an alert tone.

Setting Return to Home

Return to Home sets the amount of time your phone takes to return to the **Ready** screen after a phone call or Private Call:

- **After Phone** — sets the amount of time your phone takes to return to the **Ready** screen after a phone call.
- **After Prvt** — sets the amount of time your phone takes to return to the **Ready** screen after a Private Call.

Each option can be set to 30 seconds, 1 minute, 5 minutes, 10 minutes, or to return to the **Ready** screen immediately.

VoiceVolume

VoiceVolume sets the volume of the sound coming from your phone's earpiece or speaker:

1	From the VoiceVolume screen, highlight Earpiece Vol to set the earpiece volume, or press  to scroll to Speaker Vol to set the speaker volume.
2	Press  under CHANGE.
3	To select a volume level: Press  to raise or lower the volume setting. Or, Press the Volume Control keys on the side of your phone.
4	Press  under OK.

Tkgrp (Talkgroup) Settings

Tkgrp Settings enables you to set certain Talkgroup options. See “Group Calls” on page 113 for more information.

Service Status

The Service Status screen shows the status of your phone's services. This screen is for information only; no options can be set.

Styles

The Styles feature enables you to save a group of settings for call and message notification, screen display, and call answering features. You save your selections as a "style" and access them at any time. You can store up to ten styles.

You may want to use this feature to create a style for use in your car, or in meetings, for example.

Each style contains the following settings:

- **Ring/Vibe** — controls how your phone rings and vibrates when you receive calls and other messages. See "Ring/Vibe" on page 142.
- **Backlight** — controls how long your phone's backlight stays on. See "Setting Backlight Timer" on page 153.
- **Display** — controls the size of the text on the full-sized display screen. See "Setting Text Display" on page 154.
- **Call Filter** — enables you to set your phone to not ring or vibrate when you receive some or all calls, messages, and alerts. See "Setting Call Filtering" on page 162.
- **Auto Answer** — sets your phone to automatically answer an incoming call after a specified number of rings. When this feature is turned on, the phone answers by connecting you to the caller; it does not send the call to Voicemail.

Using the Styles feature, you can create styles, edit styles, view a style's properties, delete styles, activate any style you have created, or turn off the active style.

To access the **Styles Menu**:

1	From the Ready screen, press  .
2	Press  to scroll to Styles .
3	Press  under SELECT .

From the **Styles Menu**, you can:

- activate a style or turn off the currently active style
- create a new style
- access the **Styles Action** menu for more Styles functions

Creating a Style

When you create a style, you give it a name and set the features of that style. The name of the style then appears on the Styles Menu.

To create a style:

1	From the Styles Menu screen, press  to scroll to [New Style] .
2	Press  under SELECT.
3	Assign a name to the style you are creating: In the Name screen, use the alphanumeric keypad to enter the name you want to give the style. As you type, you can delete a letter by pressing  under DELETE. To create a space, press  once. Press  under OK.
4	In the New screen, press  to scroll through the settings for each style option.
5	To change any style option: Press  to highlight the option. Press  under CHANGE or SELECT. Use the screens that appear to make your changes.
6	When all the style options have the settings you want, press  under DONE.

Editing a Style

To change the settings of a style:

1	From the Styles Menu screen, press  to scroll to the name of the style you want to edit.
2	Press  to access the Styles Action menu.
3	Press  to scroll to Edit and press  under SELECT .
4	To change any style option: Press  to highlight the option. Press  under CHANGE or SELECT. Use the screens that appear to make your changes.
5	When all the style options have the settings you want, press  under DONE. NOTE: A message will appear notifying the user that the changes to a previously set style will not take effect until the style is "off".

Activating a Style

When you access the **Styles Menu**, a check mark appears to the left of the name of the style that is currently active on your phone. If no style is active, the check mark appears next to **Off**.

To activate a style:

1	From the Styles Menu screen, press  to scroll to the name of the style you want to activate.
2	Press  under SELECT .

The style immediately becomes active on your phone and the style name displays on the idle screen.

Turning Off a Style

To turn off a style without activating another style:

- | | |
|---|---|
| 1 | From the Styles Menu screen, press  to scroll to Off . |
| 2 | Press  under SELECT . |

Using the Styles Action Menu

When you highlight a style on the Styles Menu, you can then access the Styles Action menu for additional Styles functions.

To access the Styles Action menu, press  from the Styles menu.

The Styles Action menu provides the following options:

- **View** — view settings of the highlighted style.
- **Change** — activate the highlighted style.
- **Edit** — edit the settings of the highlighted style.
- **New** — create a new style.
- **Delete** — delete the highlighted style.
- **Delete All** — delete all styles.

Setting Call Filtering

The Call Filter feature enables you to control which calls, messages, and alerts your phone responds to, and which it ignores.

From the Call Filter screen, you set separate filtering options for phone calls, Private and Group calls, alerts, and messages:

- **Phone** — sets filtering options for phone calls.
- **Prvt/Grp** — sets filtering options for Private and Group calls.
- **Alerts** — sets filtering options for call alerts.
- **Notifications** — sets filtering options for messages.

Setting Phone Call Filtering

Call Filter enables you to set your phone to respond to all calls, no calls, or only calls from some or all numbers in your Phonebook:

- **Off** sets your phone to notify you of all calls.
- **All** sets your phone to ignore all calls.
- **All Phonebook** sets your phone to notify you only of calls from the numbers stored in your Phonebook.
- **Some Phonebook** sets your phone to notify you only of calls from numbers you select from your Phonebook. You may choose up to five Phonebook entries.

To choose Phonebook entries that you want your phone to respond to calls from:

1	From the Call Filter screen, press  to scroll to Phone .
2	Press  under CHANGE .
3	Press  to scroll to Some Phonebook .
4	Press  under SELECT . The entries stored in your Phonebook appear.
5	To select a Phonebook entry as one you want your phone to respond to calls from, press  to scroll to the Phonebook entry and press  under SELECT. A check mark appears next to each selected Phonebook entry. You may select up to five Phonebook entries.
6	To remove a selected Phonebook entry from the list, press  to scroll to the name and press  under SELECT .
7	When you have selected the Phonebook entries you want, press  under DONE .

Setting Private and Group Call Filtering

Setting **Prvt/Grp** to **On** sets your phone to ignore all Private and Group calls. Setting **Prvt/Grp** to **Off** sets your phone to respond to all Private and Group calls.

Setting Alert Filtering

Setting **Alerts** to **On** sets your phone to ignore all call alerts. Setting **Alerts** to **Off** sets your phone to respond to all call alerts.

Setting Message Notification Filtering

Call Filter enables you to set your phone to notify you of some types of messages, all types of messages, or no messages:

- **Off** allows your phone to notify you of all messages.
- **Voice Messages** allows your phone to notify you of Voicemail messages.
- **Text Messages** allows your phone to notify you of Text Messages messages.
- **All** prevents your phone from notifying you of all messages.

Call Filter can prevent your phone from ringing or vibrating when you receive a message. Your display screen will still indicate that you have messages.

Shortcuts

The Shortcuts feature enables you to access most menu or submenu options in your phone by pressing a numeric button on the keypad or speaking a voice name for the shortcut. You create the shortcut to the menu by assigning a number to it and then access the menu by pressing the number.

Creating a Shortcut

- 1 Navigate to the menu item to which you want to create a shortcut. For example, if you wanted to create a shortcut to **Ring/Vibe**:

From the **Ready** screen, press , then press  to scroll to **Settings**. Press  under **SELECT**. **Ring/Vibe** is now highlighted in the **Settings** screen.

- 2 Press and hold  for about 2 seconds.

- 3 A confirmation screen displays showing the name of the menu item to which you want to create a shortcut. To proceed with assigning the shortcut, press  under **YES**.

- 4 A screen displays showing the assigned shortcut number.

If you want to change the shortcut number:

Press  under CHANGE.

Press  under DELETE to erase the assigned number.

Enter the desired number on your keypad and press  under OK.

- 5 If you want to record a voice name for that shortcut:

Press  to highlight the **Voice** field.

Press  under RECORD.

As directed by the screen prompts, say and repeat the name you want to assign to the shortcut. Speak clearly into the microphone.

An  icon appears in the **Voice** field indicating that the voice name has been recorded.

USER TIP: For best results, record in a quiet environment.

- 6 Press  under DONE.

Using a Shortcut

To use a shortcut to access a menu:

- 1 From the **Ready** screen, press .
- 2 Press the number assigned to the shortcut. You have 2 seconds to do this after pressing .

Or,

- 1 From the **Ready** screen, press .
- 2 Press  to scroll to **Shortcuts**.

3	Press  under SELECT.
4	Press  to scroll to the shortcut you want to use.
5	Press  under GOTO.

Or, if you have assigned the shortcut a voice name:

1	From the Ready screen, press and hold  on the top of your phone until the Say Name Now screen appears.
2	Say the voice name assigned to the shortcut into your phone's microphone.
3	Your phone will play the voice name back to you.

Using the Shortcut Menu

The Shortcut Menu enables you to manage your shortcuts with the following options.

- **New** — view instructions for assigning a shortcut.
- **Edit** — edit a shortcut name and key number.
- **Reorder** — assign existing shortcuts to a different key number.
- **Delete** — delete any highlighted Shortcut.
- **Delete All** — delete all stored Shortcuts.

To access the **Shortcut** menu:

1	From the Ready screen, press  .
2	Press  to scroll to Shortcuts .
3	Press  under SELECT.
4	Press  .

Accessories

This section includes the following topics:

Batteries	Page 167
Travel Chargers	Page 168
Carry Holster	Page 170
Data Accessories	Page 171

Batteries

For best results, charge the batteries within the temperature range of 10°C to 40°C (50°F to 104°F).

Prolonged charging is not recommended. For battery charging guidelines, see Table below.

Charging Lithium Ion Batteries

Table 1 provides the approximate time to fully charge a battery using a Motorola iDEN Approved Lithium Ion battery charger. Check the kit number on your battery and charger to determine the appropriate charging time.

Table 1: Battery Charging Times

MOTOROLA BATTERIES		Charging Time to 100%	
Kit Number	Description/ Chemistry	Rapid Charger (SPN4716)	Mid-Rate Charger (SPN4940) or (SPN4808)
SNN5705	High Performance Li Ion	2 hours 30 minutes	5 hours
SNN5717	Slim Li Ion	2 hours 30 minutes	4 hours

NOTE: Charging times are based on a fully discharged battery.

NOTE: Use only the batteries listed in Table 1 on page 167 as they are compatible with the battery cover supplied with the radio product.

For optimal battery life, use a Motorola iDEN Approved Lithium Ion battery charger with your Motorola iDEN Lithium Ion battery. Other chargers may not fully charge your Lithium Ion battery.

Additional Battery Information and Instructions

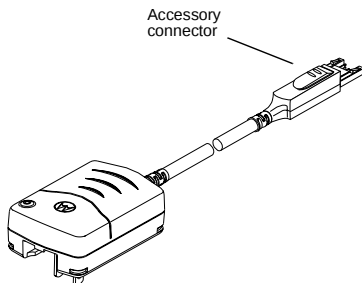
- Extreme temperatures will degrade battery performance. Do not store your battery where temperatures exceed 60°C (140°F) or fall below -20°C (4°F).
- Lithium Ion batteries have a self discharge rate and without use, will lose about 1% of its charge per day.
- The battery capacity will be degraded if stored for long periods while fully charged. If long term storage is required, store at half capacity.
- The Motorola iDEN Approved Lithium Ion chargers will provide optimum performance. Other chargers may not fully charge your iDEN Lithium Ion battery or may yield a reduced number of lifetime charge cycles.
- When batteries are not in use, always store them in the plastic safety tray.

Travel Chargers

Using one of the Travel Chargers listed below, you can charge a battery from an AC outlet. On one end of the Travel Charger, an accessory connector attaches to the bottom of the phone. At the other (AC outlet) end of the device, there is a compact housing that contains the plug-in power supply.

TRAVEL CHARGERS	
Kit Number	Description
SPN4940	Mid-Rate Multi-Voltage Travel Charger
SPN4716	Rapid Multi-Voltage Travel Charger
SPN4808	Mid-Rate Economy Travel Charger

NOTE: Additional adaptor plugs to accommodate various International power outlets can be purchased separately for the multi-voltage Travel Chargers.



Using the Travel Charger

- 1 While holding the phone with its keypad facing up, insert the accessory connector (with the Motorola logo facing you) into the bottom of the phone until you hear a click.
- 2 If you have either the Mid-Rate Multi-Voltage Travel Charger or the Rapid Multi-Voltage Travel Charger, flip open the prongs, and plug the Travel Charger transformer into an AC wall outlet.

Or

If you have the Mid-Rate Economy Travel Charger, plug the Travel Charger transformer into an AC wall outlet.

Multi-Voltage Travel Charger Operating Specifications

Input voltage range: 90-264 VAC @ 50/60 Hz.

Operating temperature range: 0°C to +50°C

Economy Travel Charger (U.S. Only)

Input voltage range: 90-120 VAC @60Hz.

Operating temperature range: 0°C to +50°C

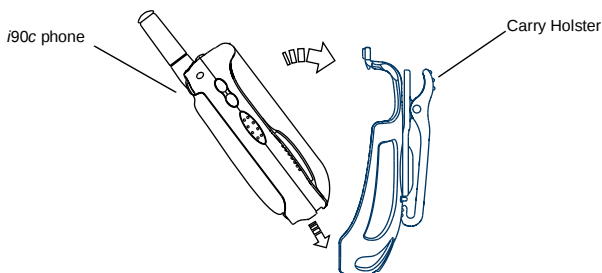
Carry Holster

The Carry Holster provides a convenient means by which to carry your i90_c phone with you.



To use the Carry Holster:

- 1 With the front of the phone facing the Carry Holster, slide the bottom portion of the phone into the bottom of the Carry Holster.



- 2 Press the upper portion of the phone into the holster until the top portion snaps into the Carry Holster.

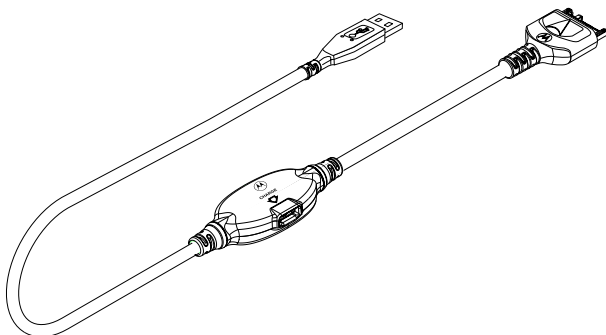
IMPORTANT:

Make sure the back of the phone is facing away from your body when you are carrying the phone in the Carry Holster.

Data Accessories

Universal Serial Bus (USB) Cable

The Universal Serial Bus (USB) cable (NNTN4007) allows you to transfer data between your *i90c* phone and a laptop or desktop computer. This cable accommodates both circuit and packet data applications.



The USB cable is authorized for use with the following operating systems only when used in conjunction with Motorola/iDEN created or approved PC applications: Windows 98 SE, Windows 2000, Windows ME.

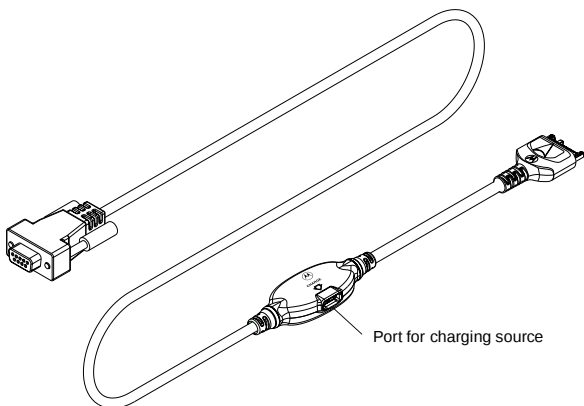
Using the USB

- 1 While holding the phone with its keypad facing up, insert the accessory connector (with the Motorola logo facing you) into the bottom of the phone until you hear a click.
- 2 Insert the data plug directly into your laptop or desktop computer.

RS232 Data Cable

The RS232 Data Cable (NKN6544) facilitates quick and easy data synchronization between your *i90c* phone and a laptop or desktop computer. This cable accommodates both circuit and packet data applications. It supports the same applications as the USB cable (see “Universal Serial Bus (USB) Cable” on page 171).

The cable also features a charging port. Any applicable iDEN phone charger may be used to charge the phone simultaneously.

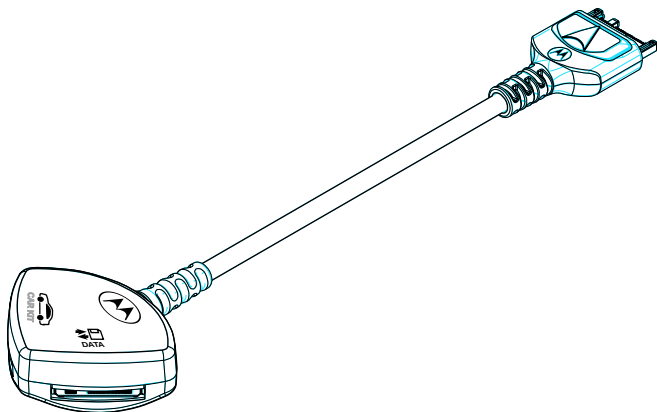


Using the Data Cable

- 1 While holding the phone with its keypad facing up, insert the accessory connector (with the Motorola logo facing you) into the bottom of the phone until you hear a click.
- 2 Insert the data plug directly into your laptop or desktop computer, or one of the many other data compatible iDEN accessories.

Dual Port Adapter Cable

The Dual Port Adapter Cable (NKN6540) enables in-vehicle communications and charging of the i90c phone via the Hands-Free Car kit, while being simultaneously connected for data operations.



Using the Dual Port Adapter Cable

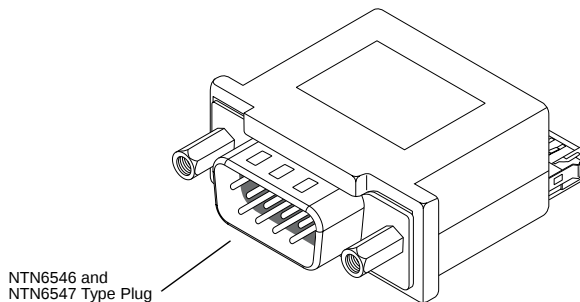
- | | |
|---|--|
| 1 | Insert the flat end of the Dual Port Adapter Cable cord into the bottom connector of the i90c phone. Make sure the Motorola logo is facing upward. |
| 2 | Insert the round end of the RS232 Data Cable into the receptacle on the Dual Port Adapter Cable labeled "Data". |
| 3 | Insert the Hands-Free Car Kit into the receptacle on the Dual Port Adapter Cable labeled "Car Kit". |

PDA Converter Plugs

The PDA (Pocket Digital Assistant) plug is a convenient way to connect your i90c phone to many types of PDA devices, both PC and Windows CE compatible.

Below is the list of adapters which can be used with your *i90c* phone:

Item Number	Description
NTN6546	Palm III™/VII™ Cable Adapter
NKN6547	Palm V™ Cable Adapter
NTN8993	Generic Pocket Digital Assistant (PDA) Male-Female Serial Adapter (Not Shown)



Using the PDA Converter Plug

- 1 While holding the phone with its keypad facing up, insert the accessory connector (with the Motorola logo facing you) into the bottom of the phone until you hear a click.
- 2 Connect the opposite end of the data cable to the PDA converter.
- 3 Connect other end of PDA converter to the mating connector of the PDA device.
- 4 If you are using the NTN8993 PDA adapter, connect the other end of the adapter to the PDA's supplied data synchronization cradle and place the PDA into the cradle.

Other Important Information

This section includes the following topics:

Understanding Status Messages	Page 175
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Understanding Status Messages

The following table lists and describes the status messages.

NOTE: When your phone cover is closed, the one-line display screen shows a shortened version of the status messages displayed in the full-size screen. To see complete status messages, open the phone cover.

Status Messages	Message Description
Number Not in Service	The number that you entered is not valid.
User Not Available	The phone that you called is either busy, out-of-coverage, or turned off. Please try again later.
User Not Authorized	The person that you called has not purchased this service.
Please Try Later	This service is temporarily not available. Please try again later.
User Busy in Private	The phone that you called is busy in a Private call.
User Busy in Data	The phone that you called is busy in a Dial-Up call.

Status Messages	Message Description
Service Restricted	This service was restricted by your service provider, or this service was not purchased.
Service Not Available	This feature is not available on the current network.
System Busy Try Later	The system is experiencing heavy traffic. Please try again later.
Service Conflict	This service cannot be enabled because an incompatible service has already been turned on.
Please Try Again	An error occurred. Please try again.
Self Check Error	A fault was detected with your phone. If this error recurs, note the error code and contact Customer Care.
Self Check Fail	An operational fault was detected with your phone. Note the numeric code, turn your phone off, and contact Customer Care.
PIN Blocked Call Your Provider	The incorrect PIN was entered three consecutive times. You will be unable to place or receive calls on your i90c phone. Call your service provider to have them obtain the PIN Unlocking Key (PUK) code.
Insert SIM	Your SIM Card is not being detected. Please check to ensure that you have inserted the SIM Card.
Check SIM Card	Please check your SIM Card to make sure it has been inserted properly.
Wrong PIN	You have entered an incorrect PIN number.
Wrong Code	Your phone will not accept a SIM card that is not from your carrier.

Safety and General Information

IMPORTANT INFORMATION ON SAFE AND EFFICIENT OPERATION.

READ THIS INFORMATION BEFORE USING YOUR INTEGRATED MULTI-SERVICE PORTABLE RADIO.

RF Operational Characteristics

Your radio product contains a radio frequency transmitter to convey the information you wish to send as well as occasional automatic signals used to sustain connection to the wireless network, and a receiver which enables you to receive communication and connection information from the network.

PORTABLE RADIO PRODUCT OPERATION AND EME EXPOSURE

Your Motorola radio product is designed to comply with the following RF exposure standards and guidelines:

- United States Federal Communications Commission, Code of Federal Regulations; 47 CFR part 2 sub-part J
- American National Standards Institute (ANSI) / Institute of Electrical and Electronics Engineers (IEEE). C95. 1-1992
- Institute of Electrical and Electronics Engineers (IEEE). C95. 1-1999 Edition
- International Commission on Non-Ionizing Radiation Protection (ICNIRP) 1998
- Ministry of Health (Canada). Safety Code 6. Limits of Human Exposure to Radiofrequency Electromagnetic Fields in the Frequency Range from 3 kHz to 300 GHz, 1999.
- Australian Communications Authority Radiocommunications (Electromagnetic Radiation - Human Exposure) Standard 2001
- ANATEL, Brasil Regulatory Authority, Resolution 256 (April 11, 2001) “additional requirements for SMR, cellular and PCS product certification.”

To assure optimal radio product performance and make sure human exposure to radio frequency electromagnetic energy is within the guidelines set forth in the above standards, always adhere to the following procedures:

Phone Operation

When placing or receiving a phone call, hold your radio product as you would a wireline telephone. **Speak directly into the microphone.**

Two-way radio operation

When using your radio product as a traditional two-way radio, **hold the radio product in a vertical position with the microphone one to two inches (2.5 to 5 cm) away from the lips.**



Body-worn operation

To maintain compliance with FCC RF exposure guidelines, if you wear a radio product on your body when transmitting, always place the radio product in a **Motorola approved clip, holder, holster, case or body harness for this product.** Use of non-Motorola-approved accessories may exceed FCC RF exposure guidelines. **If you do not use a Motorola approved body-worn accessory and are not using the radio product in the intended use positions along side the head in the phone mode or in front of the face in the two-way radio mode, then ensure the antenna and the radio product are kept the following minimum distances from the body when transmitting:**

- **Phone or Two-way radio mode: one inch (2.5 cm)**
- **Data operation using any data feature with or without an accessory cable: one inch (2.5 cm)**

Antenna Care

Use only the supplied or an approved replacement antenna. Unauthorized antennas, modifications, or attachments could damage the radio product and may violate FCC regulations.

DO NOT hold the antenna when the radio product is “IN USE”. Holding the antenna affects call quality and may cause the radio product to operate at a higher power level than needed.

Approved Accessories

For a list of approved Motorola accessories, call 1-800-453-0920, visit our website at www.mot.com/iden or look in the accessory section of this manual.

THIS MODEL PHONE MEETS THE GOVERNMENT'S REQUIREMENTS FOR EXPOSURE TO RADIO WAVES.

Your wireless phone is a radio transmitter and receiver. It is designed and manufactured not to exceed the emission limits for exposure to radiofrequency (RF) energy set by the Federal Communications Commission of the U.S. Government. These limits are part of comprehensive guidelines and establish permitted levels of RF energy for the general population. The guidelines are based on standards that were developed by independent scientific organizations through periodic and thorough evaluation of scientific studies. The standards include a substantial safety margin designed to assure the safety of all persons, regardless of age and health.

The exposure standard for wireless mobile phones employs a unit of measurement known as the Specific Absorption Rate, or SAR. The SAR limit set by the FCC is 1.6 W/kg.* Tests for SAR are conducted using standard operating positions reviewed by the FCC with the phone transmitting at its highest certified power level in all tested frequency bands. Although the SAR is determined at the highest certified power level, the actual SAR level of the phone while operating can be well below the maximum value. This is because the phone is designed to operate at multiple power levels so as to use only the power required to reach the network. In general, the closer you are to a wireless base station antenna, the lower the power output.

Before a phone model is available for sale to the public, it must be tested and certified to the FCC that it does not exceed the limit established by the government-adopted requirement for safe exposure. The tests are performed in positions and locations (e.g., at the ear and worn on the body) as required by the FCC for each model. The highest SAR value for this model when tested for use at the ear is 1.15 W/kg and when tested on the body, as described in this user guide, is 0.71 W/kg during packet data transmission. (Body-worn measurements differ among phone models, depending upon available accessories and FCC requirements.) While there may be differences between the SAR levels of various phones and at various positions, they all meet the government requirement for safe exposure.

The FCC has granted an Equipment Authorization for this model phone with all reported SAR levels evaluated as in compliance with the FCC RF exposure guidelines. SAR information on this model phone is on file with the FCC and can be found under the Display Grant section of <http://www.fcc.gov/oet/fccid> after searching on FCC ID: AZ489FT5808.

Additional information on Specific Absorption Rates (SAR) can be found on the Cellular Telecommunications Industry Association (CTIA) web-site at <http://www.wow-com.com>.

* In the United States and Canada, the SAR limit for mobile phones used by the public is 1.6 watts/kg (W/kg) averaged over one gram of tissue. The standard incorporates a substantial margin of safety to give additional protection for the public and to account for any variations in measurements.

Electro Magnetic Interference/Compatibility

NOTE: Nearly every electronic device is susceptible to electromagnetic interference (EMI) if inadequately shielded, designed or otherwise configured for electromagnetic compatibility.

Facilities

To avoid electromagnetic interference and/or compatibility conflicts, turn off your radio product in any facility where posted notices instruct you to do so. Hospitals or health care facilities may be using equipment that is sensitive to external RF energy.

Aircraft

When instructed to do so, turn off your radio product when on board an aircraft. Any use of a radio product must be in accordance with applicable regulations per airline crew instructions.

Medical Devices

Pacemakers

The Advanced Medical Technology Association (AdvaMed) recommends that a minimum separation of 6 inches (15 cm) be maintained between a handheld wireless radio product and a pacemaker. These recommendations are consistent with those of the U.S. Food and Drug Administration.

Persons with pacemakers should:

- ALWAYS keep the radio product more than 6 inches (15 cm) from their pacemaker when the radio product is turned ON.
- Not carry the radio product in a breast pocket.
- Use the ear opposite the pacemaker to minimize the potential for interference.
- Turn the radio product OFF immediately if you have any reason to suspect that interference is taking place.

Hearing Aids

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

Other Medical Devices

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

www.motorola.com/iden

Use While Driving

Check the laws and regulations on the use of radio products in the area where you drive. Always obey them.

When using the radio product while driving, please:

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

**WARNING****Operational Warnings****For Vehicles with an Air Bag**

Do not place a portable radio product in the area over the air bag or in the air bag deployment area. Air bags inflate with great force. If a portable radio is placed in the air bag deployment area and the air bag inflates, the radio product may be propelled with great force and cause serious injury to occupants of the vehicle.

Potentially Explosive Atmospheres

Turn off your radio product prior to entering any area with a potentially explosive atmosphere, unless it is a radio product type especially qualified for use in such areas as “Intrinsically Safe” (for example, Factory Mutual, CSA, or UL approved). Do not remove, install, or charge batteries in such areas. Sparks in a potentially explosive atmosphere can cause an explosion or fire resulting in bodily injury or even death.

NOTE: The areas with potentially explosive atmospheres referred to above include fueling areas such as below decks on boats, fuel or chemical transfer or storage facilities, areas where the air contains chemicals or particles, such as grain, dust or metal powders, and any other area where you would normally be advised to turn off your vehicle engine. Areas with potentially explosive atmospheres are often but not always posted.

Blasting Caps and Areas

To avoid possible interference with blasting operations, turn off your radio product when you are near electrical blasting caps, in a blasting area, or in areas posted: “Turn off two-way radio”. Obey all signs and instructions.



Caution

Operational Cautions

Antennas

Do not use any portable radio product that has a damaged antenna. If a damaged antenna comes into contact with your skin, a minor burn can result.

Batteries

All batteries can cause property damage and/or bodily injury, such as burns if a conductive material such as jewelry, keys, or beaded chains touches exposed terminals. The conductive material may complete an electrical circuit (short circuit) and become quite hot. Exercise care in handling any charged battery, particularly when placing it inside a pocket, purse, or other container with metal objects.

Cleaning and Drying Considerations

Using a leather carry case may help protect the surfaces and help prevent liquids (e.g., rain) from entering into the interior of the radio product. This product is not water proof, and exposing the unit to liquids may result in permanent damage to the unit.

If your radio product interior gets wet, then do not try to accelerate drying with the use of an oven or a dryer as this will damage the radio product and void the warranty. Instead, do the following:

1. Immediately power off the radio product.
2. Remove Battery and SIM card (if so equipped) from radio product.
3. Shake excess liquid from radio product.
4. Place the radio product and battery in an area that is at room temperature and has good air flow.

5. Let the radio product, battery dry, and SIM card for 72 hours before reconnecting the battery and/or powering on the radio product.

If the radio product does not work after following the steps listed above, contact your dealer for servicing information.

Clean the external surfaces of the radio product with a damp cloth, using a mild solution of dishwashing detergent and water. Some household cleaners may contain chemicals that could seriously damage the radio product. Avoid the use of any petroleum-based solvent cleaners. Also, avoid applying liquids directly on the radio product.

Accessory Safety Information

IMPORTANT:

SAVE THESE ACCESSORY SAFETY INSTRUCTIONS

- Before using any battery or battery charger, read all the instructions for and cautionary markings on (1) the battery, (2) the battery charger, which may include a separate wall-mounted power supply or transformer, and (3) the radio product using the battery.
- Do not expose any battery charger to water, rain, or snow as they are designed for indoor or in-vehicle use only.

 WARNING	To reduce the risk of injury, charge only the rechargeable batteries listed in the Accessories section of this manual. Other types of batteries may burst, causing personal injury and damage.
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- To reduce the risk of damage to the cord or plug, pull by the plug rather than the cord when you disconnect the battery charger from the power source outlet.
- Do not operate any battery charger with a damaged cord or plug — replace them immediately.
- Battery chargers may become warm during operation, but not hot. If it becomes hot to the touch, unplug it from the power outlet immediately and discontinue its use.
- Use of a non-recommended attachment to a battery charger may result in a risk of fire, electric shock, or injury to persons.
- Make sure the battery charger power cord is located so that it will not be stepped on, tripped over, or subjected to damage or stress.
- An extension cord should not be used with any battery charger unless absolutely necessary. Use of an improper extension cord could result in a risk of fire and electric shock. If an extension cord must be used, make sure that:
 - The pins on the plug of the extension cord are the same number, size, and shape as those on the plug of the charger.
 - The extension cord is properly wired and in good electrical condition.
 - The cord size is 18AWG for lengths up to 100 feet and 16AWG for lengths up to 150 feet.

- Do not operate any battery charger if it has received a sharp blow, has been dropped, or has been damaged in any way; take it to a qualified service technician.
- Do not disassemble a battery charger; take it to a qualified service technician when service or repair is required. Incorrect reassembly may result in a risk of electric shock or fire.
- Maximum ambient temperature around the power supply or transformer of any battery charger should not exceed 40°C (104°F).
- The output power from the power supply or transformer must not exceed the rating given on the Desktop Dual-Pocket Charger.
- The disconnection from the line voltage is made by unplugging the power supply from the AC receptacle.
- To reduce risk of electric shock, unplug any battery charger from the outlet before attempting any maintenance or cleaning.

For optimum charging performance, turn off the radio product while charging it in any battery charger.

The U.S. Food and Drug Administration's Center for Devices and Radiological Health Consumer Update on Mobile Phones



FDA has been receiving inquiries about the safety of mobile phones, including cellular phones and PCS phones. The following summarizes what is known--and what remains unknown--about whether these products can pose a hazard to health, and what can be done to minimize any potential risk. This information may be used to respond to questions.

Why the concern?

Mobile phones emit low levels of radiofrequency energy (i.e., radiofrequency radiation) in the microwave range while being used. They also emit very low levels of radiofrequency energy (RF), considered non-significant, when in the stand-by mode. It is well known that high levels of RF can produce biological damage through heating effects (this is how your microwave oven is able to cook food). However, it is not known whether, to what extent, or through what mechanism, lower levels of RF might cause adverse health effects as well. Although some research has been done to address these questions, no clear picture of the biological effects of this type of radiation has emerged to date. Thus, the available science does not allow us to conclude that mobile phones are absolutely safe, or that they are unsafe. However, the available scientific evidence *does not* demonstrate any adverse health effects associated with the use of mobile phones.

What kinds of phones are in question?

Questions have been raised about hand-held mobile phones, the kind that have a built-in antenna that is positioned close to the user's head during normal telephone conversation. These types of mobile phones are of concern because of the short distance between the phone's antenna--the primary source of the RF--and the person's head. The exposure to RF from mobile phones in which the antenna is located at greater distances from the user (on the outside of a car, for example) is drastically lower than that from hand-held phones, because a person's RF exposure decreases rapidly with distance from the source. The safety of so-called "cordless phones," which have a base unit connected to the telephone wiring in a house and which operate at far lower power levels and frequencies, has not been questioned.

How much evidence is there that hand-held mobile phones might be harmful?

Briefly, there is not enough evidence to know for sure, either way; however, research efforts are on-going. The existing scientific evidence is conflicting and many of the studies that have been done to date have suffered from flaws in their research methods. Animal experiments investigating the effects of RF exposures characteristic of mobile phones have yielded conflicting results. A few animal studies, however, have suggested that low levels of RF could accelerate the development of cancer in laboratory animals. In one study, mice genetically altered to be predisposed to developing one type of cancer developed more than twice as many such cancers when they were exposed to RF energy compared to controls. There is much uncertainty among scientists about whether results obtained from animal studies apply to the use of mobile phones. First, it is uncertain how to apply the results obtained in rats and mice to humans. Second, many of the studies that showed increased tumor development used animals that had already been treated with cancer-causing chemicals, and other studies exposed the animals to the RF virtually continuously--up to 22 hours per day.

For the past five years in the United States, the mobile phone industry has supported research into the safety of mobile phones. This research has resulted in two findings in particular that merit additional study:

1. In a hospital-based, case-control study, researchers looked for an association between mobile phone use and either glioma (a type of brain cancer) or acoustic neuroma (a benign tumor of the nerve sheath). No statistically significant association was found between mobile phone use and acoustic neuroma. There was also no association between mobile phone use and gliomas when all types of types of gliomas were considered together. It should be noted that the average length of mobile phone exposure in this study was less than three years.

When 20 types of glioma were considered separately, however, an association was found between mobile phone use and one rare type of glioma, neuroepitheliomatous tumors. It is possible with multiple comparisons of the same sample that this association occurred by chance. Moreover, the risk did not increase with how often the mobile phone was used, or the length of the calls. In fact, the risk actually *decreased* with cumulative hours of mobile phone use. Most cancer causing agents increase risk with increased exposure. An ongoing study of brain cancers by the National Cancer Institute is expected to bear on the accuracy and

repeatability of these results.(1)

2. Researchers conducted a large battery of laboratory tests to assess the effects of exposure to mobile phone RF on genetic material. These included tests for several kinds of abnormalities, including mutations, chromosomal aberrations, DNA strand breaks, and structural changes in the genetic material of blood cells called lymphocytes. None of the tests showed any effect of the RF except for the micronucleus assay, which detects structural effects on the genetic material. The cells in this assay showed changes after exposure to simulated cell phone radiation, but only after 24 hours of exposure. It is possible that exposing the test cells to radiation for this long resulted in heating. Since this assay is known to be sensitive to heating, heat alone could have caused the abnormalities to occur. The data already in the literature on the response of the micronucleus assay to RF are conflicting. Thus, follow-up research is necessary.(2)

FDA is currently working with government, industry, and academic groups to ensure the proper follow-up to these industry-funded research findings. Collaboration with the Cellular Telecommunications Industry Association (CTIA) in particular is expected to lead to FDA providing research recommendations and scientific oversight of new CTIA-funded research based on such recommendations.

Two other studies of interest have been reported recently in the literature:

1. Two groups of 18 people were exposed to simulated mobile phone signals under laboratory conditions while they performed cognitive function tests. There were no changes in the subjects' ability to recall words, numbers, or pictures, or in their spatial memory, but they were able to make choices more quickly in one visual test when they were exposed to simulated mobile phone signals. This was the only change noted among more than 20 variables compared.(3)
2. In a study of 209 brain tumor cases and 425 matched controls, there was no increased risk of brain tumors associated with mobile phone use. When tumors did exist in certain locations, however, they were more likely to be on the side of the head where the mobile phone was used. Because this

occurred in only a small number of cases, the increased likelihood was too small to be statistically significant.(4)

In summary, we do not have enough information at this point to assure the public that there are, or are not, any low incident health problems associated with use of mobile phones. FDA continues to work with all parties, including other federal agencies and industry, to assure that research is undertaken to provide the necessary answers to the outstanding questions about the safety of mobile phones.

What is known about cases of human cancer that have been reported in users of hand-held mobile phones?

Some people who have used mobile phones have been diagnosed with brain cancer. But it is important to understand that this type of cancer also occurs among people who have not used mobile phones. In fact, brain cancer occurs in the U.S. population at a rate of about 6 new cases per 100,000 people each year. At that rate, assuming 80 million users of mobile phones (a number increasing at a rate of about 1 million per month), about 4800 cases of brain cancer would be expected each year among those 80 million people, whether or not they used their phones. Thus it is not possible to tell whether any individual's cancer arose because of the phone, or whether it would have happened anyway. A key question is whether the risk of getting a particular form of cancer is greater among people who use mobile phones than among the rest of the population. One way to answer that question is to compare the usage of mobile phones among people with brain cancer with the use of mobile phones among appropriately matched people without brain cancer. This is called a case-control study. The current case-control study of brain cancers by the National Cancer Institute, as well as the follow-up research to be sponsored by industry, will begin to generate this type of information.

What is FDA's role concerning the safety of mobile phones?

Under the law, FDA does not review the safety of radiation-emitting consumer products such as mobile phones before marketing, as it does with new drugs or medical devices. However, the agency has authority to take action if mobile phones are shown to emit radiation at a level that is hazardous to the user. In such a case, FDA could require the manufacturers of mobile phones to notify users of the health hazard and to repair, replace or recall the phones so that the hazard no longer exists.

Although the existing scientific data do not justify FDA regulatory actions at this time, FDA has urged the mobile phone industry to take a number of steps to assure public safety. The agency has recommended that the industry:

- support needed research into possible biological effects of RF of the type emitted by mobile phones;
- design mobile phones in a way that minimizes any RF exposure to the user that is not necessary for device function; and
- cooperate in providing mobile phone users with the best possible information on what is known about possible effects of mobile phone use on human health.
- At the same time, FDA belongs to an interagency working group of the federal agencies that have responsibility for different aspects of mobile phone safety to ensure a coordinated effort at the federal level. These agencies are:
 - National Institute for Occupational Safety and Health
 - Environmental Protection Agency
 - Federal Communications Commission
 - Occupational Health and Safety Administration
 - National Telecommunications and Information Administration

The National Institutes of Health also participates in this group.

In the absence of conclusive information about any possible risk, what can concerned individuals do?

If there is a risk from these products--and at this point we do not know that there is--it is probably very small. But if people are concerned about avoiding even potential risks, there are simple steps they can take to do so. For example, time is a key factor in how much exposure a person receives. Those persons who spend long periods of time on their hand-held mobile phones could consider holding lengthy conversations on conventional phones and reserving the hand-held models for shorter conversations or for situations when other types of phones are not available.

People who must conduct extended conversations in their cars every day could switch to a type of mobile phone that places more distance between their bodies and the source of the RF, since the exposure level drops off dramatically with distance. For example, they could switch to:

- a mobile phone in which the antenna is located outside the vehicle,
- a hand-held phone with a built-in antenna connected to a different antenna mounted on the outside of the car or built into a separate package, or
- a headset with a remote antenna to a mobile phone carried at the waist.

Again, the scientific data *do not* demonstrate that mobile phones are harmful. But if people are concerned about the radiofrequency energy from these products, taking the simple precautions outlined above can reduce any possible risk.

Where can I find additional information?

For additional information, see the following websites:

- **Federal Communications Commission (FCC)** RF Safety Program (select "Information on Human Exposure to RF Fields from Cellular and PCS Radio Transmitters"): <http://www.fcc.gov/oet/rfsafety> .
- **World Health Organization (WHO)** International Commission on Non-Ionizing Radiation Protection (select Qs & As): <http://www.who.int/emf>
- **United Kingdom, National Radiological Protection Board:** <http://www.nrpb.org.uk> .
- **Cellular Telecommunications Industry Association (CTIA):** <http://www.wow-com.com> .
- **U.S. Food and Drug Administration (FDA)** Center for Devices and Radiological Health: <http://www.fda.gov/cdrh/consumer/> .

References:

1. Muscat et al. Epidemiological Study of Cellular Telephone Use and Malignant Brain Tumors. In: State of the Science Symposium; 1999 June 20; Long Beach, California.
2. Tice et al. Tests of mobile phone signals for activity in genotoxicity and other laboratory assays. In: Annual Meeting of the Environmental Mutagen Society; March 29, 1999, Washington, D.C.; and personal communication, unpublished results.
3. Preece, AW, Iwi, G, Davies-Smith, A, Wesnes, K, Butler, S, Lim, E, and Varey, A. Effect of a 915-MHz simulated mobile phone signal on cognitive function in man. *Int. J. Radiat. Biol.*, April 8, 1999.
4. Hardell, L, Nasman, A, Pahlson, A, Hallquist, A and Mild, KH. Use of cellular telephones and the risk for brain tumors: a case-control study. *Int. J. Oncol.*, 15: 113-116, 1999.

Limited Warranty Motorola Communication Products

NOTE :

This Warranty applies within the fifty (50) united states and the District of Columbia

I. WHAT THIS WARRANTY COVERS AND FOR HOW LONG:

MOTOROLA, INC. ("MOTOROLA") warrants the MOTOROLA manufactured iDEN Communication Products listed below ("Product") against defects in material and workmanship under normal use and service for a period of time from the date of purchase as scheduled below:

iDEN Subscriber Digital Mobile and Portable Units	One (1) Year
Product Accessories	One (1) Year
Batteries	One (1) Year

Rechargeable Batteries will be replaced during the applicable warranty period if:

- the battery capacity falls below 80% of rated capacity, or
- the battery develops leakage.

MOTOROLA, at its option, will at no charge either repair the Product (with new or reconditioned parts), replace it (with a new or reconditioned Product), or refund the purchase price of the Product during the warranty period provided it is returned in accordance with the terms of this warranty. Replaced parts or boards are warranted for the balance of the original applicable warranty period. All replaced parts of Product shall become the property of MOTOROLA.

This express limited warranty is extended by MOTOROLA to the original end user purchaser only and is not assignable or transferable to any other party. This is the complete warranty for the Product manufactured by MOTOROLA. MOTOROLA assumes no obligations or liability for additions or modifications

to this warranty unless made in writing and signed by an officer of MOTOROLA. Unless made in a separate agreement between MOTOROLA and the original end user purchaser, MOTOROLA does not warrant the installation, maintenance or service of the Product.

MOTOROLA cannot be responsible in any way for any ancillary equipment not furnished by MOTOROLA which is attached to or used in connection with the Product, or for operation of the Product with any ancillary equipment, and all such equipment if expressly excluded from this warranty. Because each system which may use the Product is unique, MOTOROLA disclaims liability for range, coverage, or operation of the system as a whole under this warranty.

II. GENERAL PROVISIONS:

This warranty sets forth the full extent of MOTOROLA'S responsibilities regarding the Product, Repair, replacement or refund of the purchase price, at MOTOROLA'S options, is the exclusive remedy. THIS WARRANTY IS GIVEN IN LIEU OF ALL OTHER EXPRESS WARRANTIES. IMPLIED WARRANTIES, INCLUDING WITHOUT LIMITATION, IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE LIMITED TO THE DURATION OF THIS LIMITED WARRANTY. IN NO EVENT SHALL MOTOROLA BE LIABLE FOR DAMAGES IN EXCESS OF THE PURCHASE PRICE OF THE PRODUCT, FOR ANY LOSS OF USE, LOSS OF TIME, INCONVENIENCE, COMMERCIAL LOSS, LOST PROFITS OR SAVINGS OR OTHER INCIDENTAL, SPECIAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OR INABILITY TO USE SUCH PRODUCT, TO THE FULL EXTENT SUCH MAY BE DISCLAIMED BY LAW.

III. STATE LAW RIGHTS:

SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, OR LIMITATION ON HOW LONG AN IMPLIED WARRANTY LASTS, SO THE ABOVE LIMITATIONS OR EXCLUSIONS MAY NOT APPLY.

This warranty gives specific legal rights, and there may be other rights which may vary from state to state.

IV. HOW TO GET WARRANTY SERVICE:

You must provide proof of purchase (bearing the date of purchase and Product item serial number) in order to receive warranty service and, also, deliver or send the Product item, transportation and insurance prepaid, to an authorized warranty service location. Warranty service will be provided by MOTOROLA through one of its authorized warranty service locations. If you first contact the company which sold you the Product (e.g., dealer or communication service provider), it can facilitate your obtaining warranty service. You can also call MOTOROLA at 1-800-453-0920 for warranty service location information.

V. WHAT THIS WARRANTY DOES NOT COVER:

- a. Defects or damage resulting from use of the Product in other than its normal and customary manner.
- b. Defects or damage from misuse, accident, water, or neglect.
- c. Defects or damage from improper testing, operation, maintenance, installation, alteration, modification, or adjustment.
- d. Breakage or damage to antennas unless caused directly by defects in material workmanship.
- e. A Product subjected to unauthorized Product modifications, disassemblies or repairs (including, without limitation, the audition to the Product of non-MOTOROLA supplied equipment) which adversely affect performance of the Product or interfere with MOTOROLA'S normal warranty inspection and testing of the Product to verify any warranty claim.
- f. Product which has had the serial number removed or made illegible.
- g. Rechargeable batteries if:
 1. Any of the seals on the battery enclosure of cells are broken or show evidence of tampering.
 2. The damage or defect is caused by charging or using the battery in equipment or service other than the Product for which it is specified.
- h. Freight costs to the repair depot.
- i. A Product which, due to illegal or unauthorized alteration of the software/firmware in the Product, does not function in accordance with MOTOROLA'S published specifications or the FCC type acceptance labeling in effect for the Product at the time the Product was initially distributed from MOTOROLA.
- j. Scratches or other cosmetic damage to Product surfaces that does not effect the operation of the Product.
- k. Normal and customary wear and tear.

VI. PATENT AND SOFTWARE PROVISIONS:

MOTOROLA will defend, at its own expense, any suit brought against the end user purchaser to the extent that it is based on a claim that the Product or parts infringe a United States patent, and Motorola will pay those costs and damages finally awarded against the end user purchaser in any such suit which are attributable to any such claim, but such defense and payments are conditioned on the following:

- a. That MOTOROLA will be notified promptly in writing by such purchaser of any notice of such claim;
- b. That MOTOROLA will have sole control of the defense of such suit and all negotiations for its settlement or compromise; and
- c. Should the Product or parts become, or in MOTOROLA'S opinion be likely to become, the subject of a claim of infringement of a patent, that such purchaser will permit MOTOROLA, at its option and expense, either to procure for such purchaser the right to continue using the Product or parts or to replace or modify the same so that it becomes non-infringing or to grant such purchaser a credit for the Product or parts as depreciated and accept its return. The depreciation will be an equal amount per year over the lifetime of the Product or parts as established by MOTOROLA.

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Limited Warranty Motorola Communication Products (International)

NOTE :

This Warranty applies in Singapore and the Philippines.

I. WHAT THIS WARRANTY COVERS AND FOR HOW LONG:

MOTOROLA warrants the MOTOROLA manufactured iDEN Communication Products listed below (“Product”) against defects in material and workmanship under normal use and service for a period of time from the date of purchase as scheduled below:

iDEN Subscriber Digital Mobile and Portable Units	One (1) Year
Product Accessories (manufactured by or under license from MOTOROLA)	One (1) Year
Batteries	One (1) Year

Rechargeable Batteries will be replaced during the applicable warranty period if:

- the battery capacity falls below 80% of rated capacity, or
- the battery develops leakage.

MOTOROLA, at its option, will at no charge either repair the Product (with new or reconditioned parts), replace it (with a new or reconditioned Product), or refund the purchase price of the Product during the warranty period provided it is returned in accordance with the terms of this warranty. Replaced parts or boards are warranted for the balance of the original applicable warranty period. All replaced parts of Product shall become the property of MOTOROLA.

This express limited warranty is extended by MOTOROLA to the original end user purchaser only and is not assignable or transferable to any other party. This is the complete warranty for the Product manufactured by MOTOROLA. MOTOROLA assumes no obligations or liability for additions or modifications

to this warranty unless made in writing and signed by an officer of MOTOROLA. Unless made in a separate agreement between MOTOROLA and the original end user purchaser, MOTOROLA does not warrant the installation, maintenance or service of the Product.

MOTOROLA cannot be responsible in any way for any ancillary equipment not furnished by MOTOROLA which is attached to or used in connection with the Product, or for operation of the Product with any ancillary equipment, and all such equipment if expressly excluded from this warranty. Because each system which may use the Product is unique, MOTOROLA disclaims liability for range, coverage, or operation of the system as a whole under this warranty.

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III. HOW TO GET WARRANTY SERVICE:

You must provide proof of purchase (bearing the date of purchase and Product item serial number) in order to receive warranty service and, also, deliver or send the Product item, transportation and insurance prepaid, to an authorized warranty service location. Warranty service will be provided by MOTOROLA through one of its authorized warranty service locations. If you first contact the company which sold you the Product (e.g., dealer or communication service provider), it can facilitate your obtaining warranty service.

IV. WHAT THIS WARRANTY DOES NOT COVER:

- a. Defects or damage resulting from use of the Product in other than its normal and customary manner.

- b. Defects or damage from misuse, accident, water, or neglect.
- c. Defects or damage from improper testing, operation, maintenance, installation, alteration, modification, or adjustment.
- d. Breakage or damage to antennas unless caused directly by defects in material workmanship.
- e. A Product subjected to unauthorized Product modifications, disassemblies or repairs (including, without limitation, the audition to the Product of non-MOTOROLA supplied equipment).
- f. Product which has had the serial number removed or made illegible.
- g. Rechargeable batteries if:
 - 1. Any of the seals on the battery enclosure of cells are broken or show evidence of tampering.
 - 2. The damage or defect is caused by charging or using the battery in equipment or service other than the Product for which it is specified.
- h. Freight costs to the repair depot.
- i. A Product which, due to illegal or unauthorized alteration of the software/firmware in the Product, does not function in accordance with MOTOROLA'S published specifications or the local type acceptance labeling in effect for the Product at the time the Product was initially distributed from MOTOROLA.
- j. Scratches or other cosmetic damage to Product surfaces that does not effect the operation of the Product.
- k. Normal and customary wear and tear.
- l. Exclusion for defects or damage arising from use of the products in connection with non-MOTOROLA equipment.

V. PATENT AND SOFTWARE PROVISIONS:

MOTOROLA will defend, at its own expense, any suit brought against the end user purchaser to the extent that it is based on a claim that the Product or parts infringe a patent, and Motorola will pay those costs and damages finally awarded against the end user purchaser in any such suit which are attributable to any such claim, but such defense and payments are conditioned on the following:

- a. That MOTOROLA will be notified promptly in writing by such purchaser of any notice of such claim;
- b. That MOTOROLA will have sole control of the defense of such suit and all negotiations for its settlement or compromise; and
- c. Should the Product or parts become, or in MOTOROLA'S opinion be likely to become, the subject of a claim of infringement of a patent,

that such purchaser will permit MOTOROLA, at its option and expense, either to procure for such purchaser the right to continue using the Product or parts or to replace or modify the same so that it becomes non-infringing or to grant such purchaser a credit for the Product or parts as depreciated and accept its return. The depreciation will be an equal amount per year over the lifetime of the Product or parts as established by MOTOROLA.

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