

Panasonic®

GU87

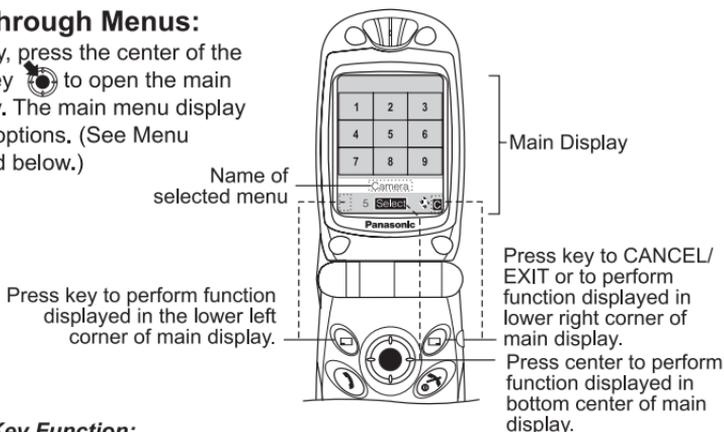
GSM™/GPRS Mobile Phone Operating Instructions



Before operating this phone, please read these instructions completely and save this manual for future use. **Charge battery before operation.**

Moving Through Menus:

From standby, press the center of the navigation key  to open the main menu display. The main menu display has 9 menu options. (See Menu Options listed below.)



Navigation Key Function:

 <p>SELECT: Press center to select option or to save. Shown as  throughout manual.</p>	 <p>SCROLL: Press top or bottom edge to move on-screen cursor up or down.</p>	 <p>MOVE: Press left or right edge to move on-screen cursor left or right.</p>
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Menu Options:

The 9 main menu options are as follows:

Note: The 9 main menu options may not display in the same order as listed here (varies based on your wireless service provider).



Options & Timers

- 1 Timers & Service
- 2 Call Forwarding
- 3 Security
- 4 Network
- 5 Text Telephony



Tools & Set Time

- 1 Game(s)
- 2 Voice Memo
- 3 Download Data
- 4 Set Time/Alarms
- 5 Calculator
- 6 Unit Converter
- 7 Infrared Port



Browser

- 1 Start Browser
- 2 Bookmark
- 3 Enter URL
- 4 Bookmark Pages
- 5 Push Message
- 6 Browser Setting
- 7 Server List
- 8 Status Log



Phonebook/V-Mail

- 1 Search
- 2 Create
- 3 Voice Dialing
- 4 Caller ID Alert
- 5 Group Names
- 6 Status
- 7 Own Number/Info
- 8 Service Dial
- 9 Voice-Mail
- * Speed Dial



Files & Setup

- 1 Data Files
- 2 Sounds
- 3 Display Settings
- 4 Language
- 5 Quiet Mode
- 6 Vibration Alert
- 7 Short Cut Key
- 8 Preset Messages
- 9 Key Guard
- * Answer Mode
- 0 DTMF Length
- # Default Settings



Messages

- 1 MMS
- 2 SMS
- 3 e-mail



Game(s)

- 1 TETRIS®
- 2 Herding Sheep



Camera



Calendar

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SAFETY FIRST

Your new phone is a convenient and effective communications tool, but it can be hazardous when used improperly. To avoid harming yourself or anyone else, please review the following information before using your phone.

BATTERIES

Batteries can cause property damage, injury, or burns if the terminals are touched with a conductive material (for example, metal jewelry, keys, and so on). Therefore, use caution when handling a charged battery. Additional precautions and notes are listed below:

- Never throw a battery into a fire; it may explode.
- Fully recharge the battery if the battery is low or as soon as the low-battery alert beeps.
- Do not drop the battery.
- Do not allow bridging of battery contacts with metallic objects.
- Do not remove the battery from the phone while the phone is powered on. Settings you have changed may revert to their previous settings.



A recyclable lithium ion/polymer battery powers your phone. Please call 1-800-8-BATTERY for information on how to recycle the battery.

CHARGING DEVICES

Use only Genuine Panasonic charging accessories. Use of attachments not recommended by Panasonic or your wireless service provider may result in fire, electrical shock, or injury. Panasonic is not responsible for damage caused by using non-Panasonic accessories.

- Do not expose charging adapters to moisture, water, or the weather.
- Do not use an adapter with a damaged cord.
- When using a DC adapter in an automobile, a small amount of electricity flows through the adapter, even if the phone is turned off. Remove the plug from the cigarette lighter whenever the phone will be left in the vehicle for long periods of time.
- Always charge the battery in a well ventilated area, not in direct sunlight, between 41°F (5°C) and 95°F (35°C). It is not possible to recharge the battery if it is outside this temperature range.
- Do not incinerate or dispose of the battery as ordinary trash. The battery must be disposed of in accordance with local legislation and may be recycled.

Caution: The cigarette lighter must have a 12V negative ground socket. Do not use the adapter in a vehicle that has a positive ground system.

GENERAL

- Do not use the phone in extreme temperature or humidity. The specified operating temperature range is -22°F to +140°F (-30°C to +60°C).
- Extreme temperatures may have a temporary effect on the operation of your phone. This is normal and does not indicate a fault.
- Do not expose the phone (particularly the display) to direct sunlight for extended periods of time or to a humid, dusty or hot area.
- Do not attempt to disassemble the phone. There are no user-serviceable parts inside.
- Do not subject the equipment to excessive vibration or shock.
- Do not expose the phone to rain or spill liquids on it. If the equipment becomes wet immediately remove the battery and charging device and contact your dealer.
- Do not carry the phone by holding the antenna.

- Do not use any accessories other than those designed for use with your phone.
- Use of attachments not recommended or sold by Panasonic or your wireless service provider may result in fire, electrical shock, or injury.
- Panasonic is not responsible for damages caused by using non-Panasonic accessories.
- Pressing any of the keys may produce a loud tone. Avoid holding the phone close to the ear while pressing the keys.
- Keep metallic items that may accidentally touch the battery terminals away from the equipment. Battery damage may occur.
- When disposing of any packing materials or old equipment check with your local authorities for information on recycling.
- If connecting the phone to an external source, read the operating instructions of the equipment for the correct connection and safety precautions.
- If connecting the phone to an external source, verify that the phone is compatible with the product to which you are connecting it.

AVAILABILITY OF SERVICE

This phone, like any wireless phone, operates using radio signals, wireless and landline networks, and user-programmed functions. Because of this, connection in all conditions cannot be guaranteed. Therefore, you should never rely solely on any wireless phone for essential communications (for example, medical emergencies).

EMERGENCY (911) SERVICE

If you need to make an emergency (911) call, power the phone on, dial 911, and press . Emergency calls can be made regardless of lock setting and with or without a SIM card.

Remember, to make or receive any call, the phone must be switched on and in a service area that has adequate signal strength. Emergency calls might not be possible on all wireless phone networks or when certain network service and/or phone features are in use.

CALL REJECTED

Your phone displays **Call Rejected** under the following conditions:

1. Call was not able to connect to the network (no circuits available, no signal available or out of service area).
2. Battery charge level is too low (recharge battery).
3. Your calling plan is expired, depleted or has reached its preset limit.

Note: Emergency (911) Service is still available.

SAFETY TIPS

Following the suggestions in this section will help ensure safe and efficient operation of your Panasonic phone.

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 1.6W/kg. Tests for SAR are conducted using standard operating positions specified 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 phone when tested for use at the ear is 0.982 W/kg and when worn on the body, as described in this user guide, is 0.364 W/kg. (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 emission 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 NWJ10A008A.

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>.

Caution: All Panasonic branded accessories are tested and comply with FCC RF exposure requirements. Non-Panasonic accessories may not comply.

BODY-WORN OPERATION

This device was tested for typical body-worn operations using the carry case model: EB-YKD87, which provides 3.0 cm. separation distance from the body. This device was also tested for body-worn operations with the back of the phone kept 1.5 cm. from the body. To maintain compliance with FCC RF exposure requirements, use only belt-clips, holsters or similar accessories that maintain a 1.5 cm. separation distance between the user's body and the back of the phone, including the antenna. The use of belt-clips, holsters and similar accessories should not contain metallic components in its assembly. The use of accessories that do not satisfy these requirements may not comply with FCC RF exposure requirements, and should be avoided.

ANTENNA CARE

Do not use the phone with a damaged antenna. Use only the supplied or an approved replacement antenna. Unauthorized antennas, modifications, or attachments could damage the phone and may violate FCC regulations.

PHONE OPERATION

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

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

DRIVING

Important: Check the laws and regulations on the use of wireless telephones in the areas where you drive. Always obey them. Also, if using your phone while driving:

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

ELECTRONIC DEVICES

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

Pacemakers: The Health Industry Manufacturers Association recommends that a minimum separation of 6 inches (6") or 15 centimeters (15 cm) be maintained between a handheld wireless phone and a pacemaker to avoid potential interference with the pacemaker. These recommendations are consistent with independent research and recommendations of Wireless Technology Research.

Persons with pacemakers:

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

Hearing Aids: Some digital wireless phones may interfere with some hearing aids. In the event of such interference, consult your wireless service provider and hearing aid manufacturer.

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

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

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

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

AIRCRAFT

FCC regulations prohibit using your phone while in the air; switch off your phone before boarding an aircraft unless otherwise advised by airline personnel.

BLASTING AREAS

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

POTENTIALLY EXPLOSIVE ATMOSPHERES

Turn your phone OFF when in any area with a potentially explosive atmosphere and obey all signs and instructions. Sparks in such areas could cause an explosion or fire resulting in bodily injury or even death.

Areas with a potentially explosive atmosphere are often, but not always, clearly marked. They include fueling areas such as gas stations; below deck on boats; fuel or chemical transfer or storage facilities; vehicles using liquefied petroleum gas (such as propane or butane); areas where the air contains chemicals or particles, such as grain, dust or metal powders; and any other area where you would normally be advised to turn off your vehicle engine.

FOR VEHICLES EQUIPPED WITH AN AIR BAG

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

For U.S. Customers: Vehicles using liquefied petroleum gas (such as propane or butane) must comply with the National Fire Protection Standard (NFPA-58).

For a copy of this standard, contact:

National Fire Protection Association

One Batterymarch Park

PO Box 9101

Quincy, MA 02269

Phone: 1-800-344-3555

Web site: www.nfpa.org

E-mail address: Custserv@NFPA.org

See “Appendix C: Consumer Update” starting on page 97 for the FDA Consumer Update on Mobile Phones published by the U.S. Food and Drug Administration.

TEN (10) DRIVER SAFETY TIPS

Your wireless telephone gives you the powerful ability to communicate by voice-almost anywhere, anytime. 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. When using your wireless phone behind the wheel of a car, practice good common sense and remember the following tips:

1. **Get to know your 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 and safety to your wireless phone with one of the many 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 get 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. **Do not take notes or look up phone numbers while driving.** Jotting down a "to do" list or flipping 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 that have the potential to divert your attention 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. Remember, it is a free call on your wireless phone!
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.

"The wireless industry reminds you to use your phone safely when driving."

For more information, please call 1-888-901-SAFE or visit www.wow-com.com

Information on this page provided by the Cellular Telecommunications Industry Association.



PREPARING YOUR PHONE FOR USE

Thank you for using a Panasonic GSM™/GPRS mobile phone. This phone operates on the Global System for Mobile Communications (GSM) networks around the world, which provides integrated voice mail, short message service (SMS), multimedia messaging service (MMS), fraud protection and superior voice quality. One of the most important GSM advantages is the removable SIM (subscriber identity module) card, which holds personal information such as phone numbers, missed calls, voice mail and text message notifications.

FEATURE AVAILABILITY

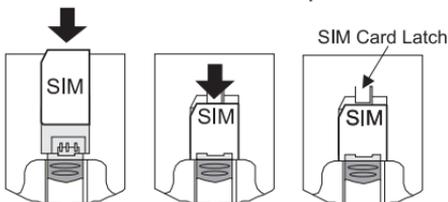
Some features are network dependent or may be available only if you subscribe. Some functions are SIM card dependent. For more information, contact your wireless service provider.

BEFORE USING YOUR PHONE

Insert SIM card, then attach battery and fully charge it.

INSTALLING SIM CARD

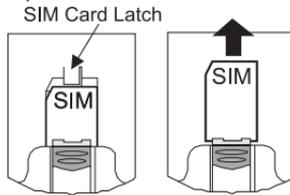
1. Remove perforated SIM card from larger plastic card.
2. Turn off phone (press and hold ) , remove battery, and remove previous SIM card.
3. Locate small recessed area on back of phone near bottom. Hold SIM card vertically with gold side face down and notched corner on the upper left. Then, slide SIM card down into recessed area.
 - SIM card should not overlap SIM card latch.



- Replace battery (see “Attaching Battery” on page 8) and turn on phone (press and hold ).
- If SIM card is inserted incorrectly or is damaged, **No SIM Present** or **SIM ERROR** may display. Repeat steps 2 to 4.
- If phone displays **SIM ERROR**, **Invalid SIM** or **SIM BLOCKED/Contact Service Provider**, contact your wireless service provider.

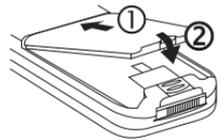
REMOVING SIM CARD

- Turn off phone and remove battery.
- While pressing down on SIM card latch, slide SIM card up and lift it out of the recessed area on back of phone.



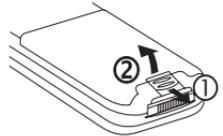
ATTACHING BATTERY

- On back of phone, hold battery at a 45° angle; insert tabs on top edge of battery into slots along top edge of battery area.
- Push bottom of battery down until it clicks into place.



REMOVING BATTERY

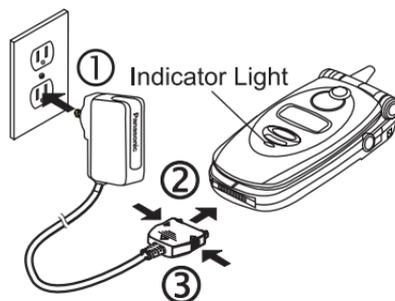
- Slide battery latch toward bottom of phone.
- Lift and remove battery.



CHARGING BATTERY

Verify that battery is attached to phone.

1. Plug Rapid Charger into a standard AC wall outlet.
2. Plug Rapid Charger connector into base of phone (with arrows facing up).



- DO NOT force the connector: it may damage the phone and/or Rapid Charger.
 - During charging, the battery charging icon  flashes on the main display and on the sub display; the red indicator light on front of phone lights.
 - The battery achieves maximum performance after two or three charges.
3. When charging is complete, the charging icon and red indicator light turn off. **Press in both side tabs** on the Rapid Charger connector and pull it gently from phone. Unplug Rapid Charger from wall outlet.

Low Battery Warning

LOW BATTERY flashes and a warning tone sounds; phone will automatically turn off. Fully recharge battery. If you receive the low battery warning during a conversation, finish your call immediately.

Charging Tips

- Always charge batteries in a well-ventilated area, not in direct sunlight, between 41°F (5°C) and 95°F (35°C).
- Temperature may slightly affect charging time. In extreme temperatures, the battery will stop charging; the indicator light and charging icon changes: . If this occurs, remove charger, return phone to an acceptable temperature level, and reconnect charger.
- It is normal for your battery to become warm to the touch while being recharged.

- Fully charge battery for recommended time. You can use phone during charging, but doing so extends charging time.

Battery Specifications

Talk Time	Standby Time	Charge Time
Up to 3 hours	Approx. 150 hours	Approx. 90 minutes*
*Based on using the EB-CA370 700 mAh Rapid Charger.		

Note: Times are approximate and may vary based on network configuration, signal strength, features selected, and phone usage. Extended gaming, camera use, or internet browsing will reduce battery life. You can set key backlighting to OFF to help extend battery life.

PRIVATE HANDSFREE HEADSET

When the Private Handsfree Headset is plugged into the phone, you can have a phone conversation without holding the phone to your ear. You can hear the other person's voice through the Private Handsfree Headset's earpiece. When you speak, your voice is picked up by the Private Handsfree Headset's microphone.

1. Pull cap out from jack on the side of the phone and securely plug in the Private Handsfree Headset connector. This will automatically disable the phone's speaker and microphone.
2. Attach clip to your clothes.
 Note: Attach clip to wire by holding back of clip and wire between thumbs and forefingers, then push wire into wire holder.
3. Insert earpiece into your ear.



4. When phone rings, press and hold Send/End button until the call connects.

OR

Set your phone to automatically answer calls. See *"H-Free Auto Ansr"* on page 75.

5. During conversation, increase or decrease volume to a comfortable level by pressing the top or bottom of the navigation key. The microphone picks up your voice from its hanging position. The Voice Memo Key on the flip flashes while call is connected.
6. When the conversation is over, press and hold the Power/End button until the call is disconnected.
7. To make a call, dial the phone number from the keypad and press . For voice dialing, press the Send/End button and say the voice dial command after the beep.

Note: You must record voice dial entries before using voice dialing. See *"Voice Dialing"* on page 60.



Warnings:

- If ring volume is set to the loudest ring, ringing may be uncomfortably loud during handsfree use. Check ring volume before enabling handsfree use to ensure volume is set to an acceptable level.
- The use of an ear insert device while driving may violate the laws of some states/provinces. Be sure to check applicable state/provincial laws before using this device.

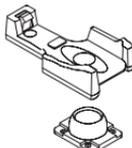
ACCESSORIES

Many accessories are available for your Panasonic phone. Contact your wireless service provider to purchase Genuine Panasonic accessories. Using non-Panasonic accessories or accessories not recommended by your wireless service provider may result in poor performance of your phone, or even cause an electrical hazard.

Replacement antennas are available from Panasonic.

- In the U.S., call 1 (800) 833-9626.
- In Canada, contact your cellular dealer.

Note: Replacement antennas are shipped with removal and assembly instructions. Do not attempt to remove the existing antenna until the replacement antenna is received.

Battery (EB-BSU87S) Li-Ion 720 mAh	Rapid Charger (EB-CA370)	DC Adapter (EB-CD300)
		
Carry Case (EB-YKD87)	Private Handsfree Headset (EB-EMD87)	Serial Data Cable (EB-RSD67B) with charging capability
		
Car Holder (EB-KAD87)		
		

KEYS & DISPLAYS

Earpiece

Main Display

Navigation Key

Press outside edges to scroll up or down, left or right to move through menus, text and phonebook. Press center to select option or to save. Also, serves as Shutter button for the camera.

Right Softkey

Perform function displayed in lower right corner of main display. Use to cancel and return to previous menu level, or to delete text/number entries. From standby, press to use shortcut. (Default is shortcut to camera.)

Power/End Key

Press and hold to turn phone on/off. When the phone is on, press briefly to end a call or return to standby.

Quiet Mode Key

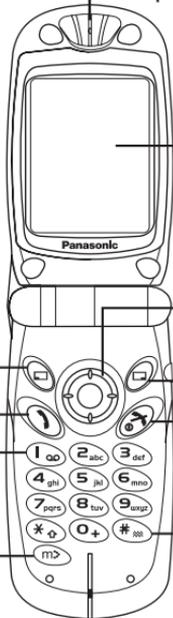
From standby, press and hold to turn Quiet Mode on/off.

Left Softkey
Perform function displayed in lower left corner of main display. From standby, press to open phonebook.

Send Key
Make a call or recall recently dialed phone numbers.

Voice Mail Key
Press and hold to retrieve Voice Mail.

One-Button Access to mModeSM
Press to open the browser (internet access).



Camera Lens

Self Portrait Mirror

Sub Display

Voice Memo Key
Press to light sub display. Also, serves as shutter button when taking self-portraits.

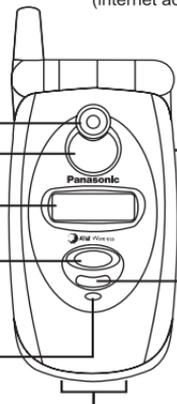
Indicator Light
Remains on during charging. Flashes to indicate incoming calls.

Headset and TTY Connector

Infrared (IrDA) Port

Transfer data between your phone and other devices with an infrared connection.

Accessory Connector



Note: See "Camera Menu" on page 35 for items that operate differently during camera use.

KEYS

Key	Function		
	Navigation Key: Scroll/move through menus, select and save settings, text and Phonebook. Also serves as a shutter button for the camera.		
		SELECT	Press center to select option or to save.
		SCROLL	Press top or bottom edge to move on-screen cursor up or down. Press and hold to move page by page. From standby, press and hold for voice dialing (if set).
	MOVE	Press left or right edge to move on-screen cursor left or right.	
	Left Softkey: Perform function displayed in lower left corner of main display. From standby, press to open phonebook.		
	Right Softkey/Cancel or Exit Key: Perform function displayed in lower right corner of main display. Primarily used to cancel and return to previous menu level, or to delete text/number entries. From standby, press to use shortcut. (Default is shortcut to camera. To change shortcut, see <i>"Short Cut Key"</i> on page 74.)		
	Send Key: Make a call or recall recently dialed phone numbers.		
	Power/End Key: When phone is on, press briefly to end a call or return to standby. Press and hold to turn phone on/off.		
 to 	1 Key/Voice Mail Key: Press and hold  to call voice mail message center. 1-9 Digit Keys: Enter numbers. Press and hold a single key (2-9) for Speed Dial. In text entry mode, enter text, numbers and characters.		
	Pause Key: Press and hold to enter a pause or wait time. When in the first position of a phone number, pressing and holding  will toggle between 0, + and _ (the international dialing prefix). See <i>"International Dialing"</i> on page 19 and <i>"Touch Tones (DTMF)"</i> on page 22.		

Key	Function
	Asterisk Key: During text entry mode, press to switch between uppercase and lowercase letters.
	Quiet Mode Key: From standby, press and hold to turn Quiet Mode (vibration) on/off. (Note: This is the default setting and works only if the Quiet Mode vibration setting remains On. See “Quiet Mode” on page 74.)
	Operator Key: (located at the bottom left side of the keypad). From standby, press to launch browser (internet page) for your wireless service provider. Note: The icon or graphic on key may vary depending on your wireless service provider.
	Voice Memo (Multi-Function) Key: (located under sub display on front of phone). Shutter button when taking self-portraits. Lights sub display and toggles date/time. Start/stop voice recording during conversation.

DISPLAYS

Main Display	Sub Display
<p>These icons will appear in the main display during TTY or Browser mode.</p> 	<p>The sub display is the small display screen located on the outside of the phone.</p> 

After some operations, the display automatically clears after three seconds or after pressing any key.

Different icons display depending on the features you are using and the options you have selected. Some icons appear on both the main display and the sub display as shown in the following table.

Icon	Indicates	Icon	Indicates
	Roaming (registered to a non-home network)		New SMS message received
	Line selection 1 (SIM card dependent)		SMS message storage area is full
	Call forwarding (call divert) is on		New MMS message received
	TTY Mode enabled		MMS message storage area is full
	New Push message received		Download data
	GPRS service is available		Key guard is on
	Four levels indicate signal strength from network on which phone is currently registered		Shortcut to Phonebook
	Three levels indicate battery charge level; low, medium, high		Shortcut key to preset menu item
	Battery is charging		Navigation key scrolling and moving options
	All ring tones/ring volume are off		Camera menu; picture will save in JPG format
	Vibration alert is on		Camera menu; brightness level 0
	Quiet mode is on		Camera menu; wide view
	New voice mail message received		Camera menu; close up view
	Phone lock is on		Camera menu; go to menu options
	Alarm is set		Camera menu; shutter button

PHONE BASICS & MANAGING CALLS

ON/OFF

Press and hold .

- When turning the phone on, first there is a brief animation, then the standby display comes on.
- If the phone is locked, an error message displays. Enter the 4-digit lock code and press . See “*Lock Phone*” on page 87.
- If your SIM card is PIN protected, an error message displays. Enter the PIN code and press . See “*PIN or PIN2*” on page 88.

STANDBY MODE

The standby display shows the name of the wireless service provider, signal strength and battery level icons, as well as shortcut to Phonebook, Menu and preset shortcut key icons. It can also display the current monthly calendar, current time/date, and GPRS (if available) icon.

- Press  (**Menu**) to access the main menu. You can change the look of the standby display, such as the background picture (wallpaper) or add/remove the calendar. See “*Display Settings*” on page 72.
- Press  () to access your Phonebook.
- Press  () to access the shortcut to your preset menu item. Default setting is Camera.

MAKING CALLS

There are many ways to make calls as described in this chapter. Phone must be on and network coverage must be available.

- To make a call, start in standby mode.
- During a call, scroll up or down to adjust earpiece volume.
- Before dialing a number from the SIM or Mobile Phonebooks, first program and save the number in the Phonebook. See “*Create*” on page 58. To update a phonebook number, see “*Search*” on page 57.
- Before using voice dialing, first record a voice dial entry. See “*Voice Dialing*” on page 60.

- For an emergency call, dial **911** and press . (911 dialing works even if the phone does not have a SIM.)
- If a call does not connect, press when **Ok** displays to automatically redial the number (up to 10 times). The phone beeps when the call connects. To cancel redial, press .



Warning: Shutting the flip during a call **DOES NOT end the call**. Opening the flip again allows you to return to your previous conversation.

Standard Dialing

1. Open flip.
2. Dial phone number and press .
 - To erase digits and re-enter before sending, press (**C**).

Phonebook Dialing

1. Press .
 - The most recently viewed phonebook (SIM or Mobile) opens. To open the other phonebook, see “*Search*” on page 57.
2. Scroll to desired phonebook entry.
3. Press .

Location Number Dialing (SIM Phonebook)

1. Enter SIM phonebook location number.
2. Press .

Note: This feature only dials from the SIM phonebook. It is not available from the Mobile phonebook.

Speed Dialing

1. Press and hold numbered key to that corresponds to phonebook location number 2 - 9.
 - You must choose which phonebook to use. See “*Speed Dial Setup*” on page 64.
2. Press .

Note: Some speed dial keys may be reserved by your wireless service provider. For example, the key may be assigned for one-touch voice mail retrieval.

Voice Dialing

1. To record a voice command, see “*Voice Dialing*” on page 60.

2. From standby, press and hold the top or bottom of the navigation key until **Please Call Voice Dialing** displays.
3. Clearly say the name (exactly as recorded) and wait.
 - Phone number and Voice Dial entry are repeated.
 - If phone does not recognize your voice command, **Failed Please Retry** displays.
4. To initiate the call, press .

Last Number Dialing

1. Press  twice to call the last dialed number.

Recent Number Dialing (Calls Made or Received)

1. Press .
2. Scroll to **Last Call, Answered Call** or **Unanswered Call**, press .
3. Scroll to desired number, press 
 - Or, to store the number in the phonebook, press . See “Create” on page 58.

Returning an Unanswered Call

1. If **Unanswered** displays, it means you missed a call. Press . The missed caller’s number displays (if available).
2. If multiple numbers display, scroll to desired number.
3. Press .

International Dialing

1. To look up a country/region code, press and hold  until “+” displays. Scroll to desired country/region (abbreviated), press .

OR

If you know the country/region code, enter it.

2. Enter the area code and phone number.
3. Press 
 - Many countries/regions include an initial “0” in the area code. In most cases, the initial “0” should be omitted when dialing international numbers.
 - Contact your wireless service provider if you need additional help making international calls.

SMS Message Dialing

A phone number included within an SMS message can be dialed directly. See *“Inbox” starting on page 47*.

ENDING CALLS

1. Press .

ANSWERING CALLS

When there is an incoming call, the phone rings and flashes green.

- If the phone is set to Quiet Mode or vibrate option, the phone flashes green and vibrates instead of ringing.

1. Open flip and press any key except .
 - Pressing any key to answer is the default setting. If you change the setting, answer by pressing . See *“Answer Key” on page 76*.

OR

If the Private Handsfree Headset is attached, see *“Private Handsfree Headset” on page 10*.

- If you press  during an incoming call, scroll to **Accept** or **Reject**, press .
- The number of unanswered/rejected calls displays.
- Press any key to clear the display.

MANAGING CALLS

Voice Mail

You must subscribe to voice mail through your wireless service provider before you can retrieve voice mail messages.

1. When a new voice mail message is received, an alert sounds and  appears on the display.
 - The display indicates the number of new voice mail messages.
 -  remains on the display until you have listened to all your voice messages.
2. Press and hold  to automatically dial your voice mail center number.
 - If the display indicates that your voice mailbox is empty or the number is not valid, contact your wireless service provider.
3. Follow the recorded instructions for your voice mail.
4. Press  when finished.

- See “Voice-Mail” on page 63 to view the voice mail center number.

Quiet Mode

Quickly change the ring volume and vibration setting of your phone to suit your environment.

For example, the preset quiet mode setting mutes the ringer and turns vibration on, perfect when entering a meeting or movie.

1. To quickly set the phone to your preset quiet mode settings, press and hold .
 - To change your Quiet Mode settings, see “Quiet Mode” on page 74.
2. To disable, press and hold  again.

IN-CALL OPTIONS

While you are connected to a call, Voice Call and the on-screen timer display.

During a call, press  and scroll to desired option:

Mute	Press  to mute the current call. Press  twice to unmute.
Memo	Press  to record a conversation. Warning: Security of a recorded message is your responsibility. You MUST ask for the other party’s consent before recording a conversation.
Hold	Press  to put a call on hold. To resume, press  , scroll to Resume , press  .
Menu	Press  to enter a submenu for accessing Memo to record a conversation, or the Browser, Phonebook/V-Mail, Messages, or Calendar.
H’free	Press  to switch to handsfree mode. See “Private Handsfree Headset” on page 10. With flip closed, also functions as speakerphone.

Adjust Volume

During a call, press the top or bottom of the Navigation key to increase or decrease the earpiece volume.

Note Pad

During a call, use the keypad to enter numbers (like using a notepad to write down a number to call later).

1. During a call, enter a phone number.
2. When call ends, press  to call notepad number.
OR
When call ends, press  to store notepad number in the phonebook. See *“Create” on page 58.*

Touch Tones (DTMF)

Touch tones can be transmitted during a call just by pressing the keys (0 to 9, #, *) on your phone. Touch tones are often used to access voice mail, paging, etc.... You can save multiple touch tone sequences with pauses to quickly send touch tones to access your accounts.

1. Enter phone number.
2. Press and hold  until a “P” (pause) displays at the end of the entered phone number.
3. Enter touch tone (DTMF) digits, for example, the access code for your voice mail.
4. Press  to immediately make the call.
OR
Press  to save the entry.
 - When the call connects, touch tones after the pause are automatically sent after 3 seconds. Or, press  again to manually send the touch tones.
 - To save the entry, see *“Create” on page 58.*
 - If you need to increase the length of the touch tone (DTMF) digits, see *“DTMF Length” on page 76.*

Two Calls at Once

(Voice calls only. Does not apply to data and fax calls.)

INCOMING CALL WHILE ON A CALL

Call Waiting must be on. See “Voice Calls” on page 85.

1. While on one call, you may receive another call.
2. If so, press  and scroll to desired option:

Accept	Press  to answer the second call while putting the original call on hold.
Reject	Press  to reject the second call.
Swap	Press  to switch between two connected calls.
End	Press  to end current call and keep other call on hold.
Trans.	When two calls are connected, press  to connect the two calls together and end your connection, leaving them to talk together. (SIM card dependent.)
Merge	When two calls are connected (one active, one on hold), press  to enable multi-party call; all three of you can talk to each other.

OR

Press  to end first call, then press any key except  or  to answer incoming call.

- Any Key answer is default setting. See “Answer Key” on page 76.
3. If connected to two calls, press  to end both calls.

MAKING A SECOND CALL

1. During a call, enter second phone number or recall it from the Phonebook.
 - See “Phonebook Dialing” on page 18.
2. Press .
 - The first call is put on hold.

Multi-Party Calls

A multi-party call has 3 to 5 people in conversation at the same time.

SIM card dependent.

1. Establish a multi-party call by merging two calls.
 - See *“Two Calls at Once” on page 23.*
2. Continue to add people to the multi-party call (up to 5 connections total) by calling the person or by accepting an incoming call.
 - When making a call or accepting an incoming call, the multi-party call is placed on hold. The callers already in the multi-party call can continue to talk with each other while on hold.
 - Each additional connection can then be merged into the multi-party call by pressing , scrolling to **Merge**, and pressing .

MULTI-PARTY CALL OPTIONS

You can select an individual from the multi-party call and split the conversation, allowing you to talk privately without the participation of the rest of the multi-party call.

1. During a multi-party call, press .
2. Scroll to **Option**, press .
3. Scroll to desired caller in the multi-party list, press .
4. Scroll to desired option, press .

Split	Press  to split the selected caller from the multi-party call so you can talk privately. The remaining multi-party callers are placed on hold and can still talk with each other. To rejoin the call, press  , scroll to Merge , press  .
End	Press  to end that call's connection.

5. Press  to end the multi-party call and all connections.

TOOLS & SET TIME MENU



To open the Tools & Set Time Menu:

1. From standby, press to open main menu display.
2. Scroll/move to highlight Tools & Set Time Menu icon , press .

GAME(S)

Play TETRIS® or Herding Sheep.

In Tools & Set Time Menu ...

1. Press [Game(s)].
2. Scroll to desired game, press .
 - See “Games Menu” on page 39 for instructions.

VOICE MEMO

Record

Record a voice memo for yourself. Or, record your conversation during a call. You may record up to four voice memos, each up to 14 seconds.

Warning: Security of a recorded message is your responsibility. You **MUST** ask for the other party's consent before recording a conversation.

1. If you are using speakerphone or handsfree during a call (flip is closed), press .

OR

In Tools & Set Time Menu ...

1. Scroll to **Voice Memo**, press .
2. Press (**Record**).
 - Speak into the microphone below the keypad.

Notes:

- A tone alerts you when recording starts and recording automatically stops after 14 seconds. Or, press or to stop recording.
- A recording is automatically saved using the time and date it was recorded.
- After 4 stored conversations, the oldest recording is overwritten.
- If you install a different SIM card, all voice memos are lost.

Playback

Listen to your recorded conversations.

1. From standby, press , continue with step 2 below.

OR

In Tools & Set Time Menu ...

1. Scroll to **Voice Memo**, press .
2. Scroll to **Playback**, press .
3. Scroll to desired recording (saved by date and time recorded), press .

Notes:

- Hold the earpiece up to your ear to hear the recording.
- Scroll up or down to adjust volume.
- If you need a "notepad", use your keypad to enter numbers during playback.

Delete

Delete recorded conversations.

1. From standby, press , continue with step 2 below.

OR

In Tools & Set Time Menu ...

Scroll to **Voice Memo**, press .

2. Scroll to **Delete**, press .
3. Scroll to desired recording (saved by date and time recorded), press  twice.

DOWNLOAD DATA

Melody

Download melodies from the internet to your phone (via a short text message service through a third party).

Network dependent.

See details about this service at:

<http://www.panasonic.com/wireless>

Note: Service may not be available in all countries due to regulatory restrictions. Please check the website for availability and further details.

1. After you download a melody, you will receive a message containing your selection. Press .
2. Scroll to select the ring tone number to store, press  twice.

- Melody is saved and can be selected as a ringtone. See “Ring Type” starting on page 70.

Logo

Download logos from the internet to your phone.

Network dependent.

See details about this service at:

<http://www.panasonic.com/wireless>

1. After you download a logo, you will receive a message containing your selection. Press ●.
2. Scroll to folder to store logo, press ● twice.
 - Logo is saved and can be selected as wallpaper. See “Wallpaper” on page 72.

SET TIME/ALARMS

Clock Set

Phone has two clocks, a home clock and an away clock that can show local time while traveling. Set time for both clocks.

In Tools & Set Time Menu ...

1. Scroll to **Set Time/Alarms**, press ●.
2. Press ● three times (**Set Date/Time > Home > Time Set**).
 - Press  to erase current date.
3. Enter date (in day/month/year format, DD/MM/YYYY).
4. Press ● to accept the date.
 - Press  to erase current time
5. Enter time (in 24-hour military time format), press ●.

SETTING DAYLIGHT SAVINGS TIME

In Tools & Set Time Menu ...

1. Scroll to **Set Time/Alarms**, press ●.
2. Press ● twice (**Set Date/Time > Home**).
3. Scroll to **Summer(DST)** daylight savings time, press ●.
4. Scroll to **On** or **Off**, press ●.

AWAY CLOCK: SETTING TIME DIFFERENCE

In Tools & Set Time Menu ...

1. Scroll to **Set Time/Alarms**, press ●.
2. Press ● (**Set Date/Time**).
3. Scroll to **Away**, press ●.
4. Press ● (**Time Difference**).
5. Scroll to desired difference from home clock, press ●.

AWAY CLOCK: SETTING DAYLIGHT SAVINGS TIME

In Tools & Set Time Menu ...

1. Scroll to **Set Time/Alarms**, press .
2. Press  (**Set Date/Time**).
3. Scroll to **Away**, press .
4. Scroll to **Summer(DST)**, press .
5. Scroll to **On** or **Off**, press .

AWAY CLOCK: SETTING AUTO ADJUSTMENT

If you travel in a country/region that has a roaming agreement with your wireless service provider, the Away Clock automatically adjusts to the local time.

Note: In countries/regions that have several time zones, you must manually adjust the clock.

In Tools & Set Time Menu ...

1. Scroll to **Set Time/Alarms**, press .
2. Press  (**Set Date/Time**).
3. Scroll to **Away**, press .
4. Scroll to **Auto Adjustment**, press .
5. Scroll to **Home Area**, press .
6. Scroll to your home country region (abbreviated), press 
 - USA1 GMT-5.0 is equivalent to Eastern Standard Time. USA6 GMT-10.0 is equivalent to Hawaii Standard Time Zone.
 - Press and hold  to scroll page by page.
7. Scroll to **Auto Adjustment**, press .
8. Scroll to **Enable** or **Disable**, press .

Format Date/Time

Set which clock displays (home or away) and the format for displaying time and date.

In Tools & Set Time Menu ...

1. Scroll to **Set Time/Alarms**, press .
2. Scroll to **Format Date/Time**, press .
3. Scroll to desired option, press .

Choose Clock	Set whether the home or away clock shows on the display. Scroll to Home Time or Away Time , press  .
Display Format	Set format for displaying time and date. Scroll to desired format, press  .

Set Alarm(s)

Set up to 4 separate alarms with unique alert tones.

In Tools & Set Time Menu ...

1. Scroll to **Set Time/Alarms**, press .
2. Scroll to **Set Alarm(s)**, press 
 - If clock has not been set, you are prompted to set clock first. See *"Clock Set" starting on page 27*.
 -  **Warning:** Ensure that any Alarm settings will not automatically power on the phone when in a location that it may interfere with medical equipment, aircraft, blasting areas, etc.... See *"Safety First" starting on page 1*.
3. Scroll to alarm to set (1 to 4), press .
4. Press , enter alarm time (hours:minutes) in 24-hour military time, press 
 - Press  to erase a previous alarm time.
5. Scroll to desired alarm interval (**Repeat Daily, Once, or Disabled**), press .
6. If desired, scroll to Ring Type, press .
7. Scroll to Fixed Data or Data Files, press .
8. Scroll to desired folder, press , scroll to desired ring type file, press .
9. Press  to Save.
 - In standby,  displays to indicate alarm is set.
 - The alarm rings based on the current clock setting (Home or Away).

WHEN THE ALARM RINGS...

The alarm rings for 30 seconds at the set time. The display flashes an alarm message and the flip flashes. If you are in a call during the alarm time, the phone vibrates instead.

To stop the alarm, press any key.

DISABLING THE ALARM

In Tools & Set Time Menu ...

1. Scroll to **Set Time/Alarms**, press .
2. Scroll to **Set Alarm(s)**, press .
3. Scroll to alarm to disable (1 to 4), press .
4. Scroll to alarm interval setting, press .
5. Scroll to **Disabled**, press .
6. Press  to save.

Set Pwr-Up Time or Set Pwr-Dwn Time

Set phone to automatically turn itself on or off at a specified time.

In Tools & Set Time Menu ...

1. Scroll to **Set Time/Alarms**, press .
2. Scroll to **Set Pwr-Up Time** or **Set Pwr-Dwn Time**, press .
3. Enter time in 24-hour military time format, press .
4. Select interval (**Repeat Daily, Once, or Disabled**), press .

 **Warning:** If setting **Pwr-Up Time**, ensure phone will not automatically power on in a location where it may interfere with medical equipment, aircraft, blasting areas, etc.... See *"Safety First"* on page 1.

CALCULATOR

Perform simple calculations (addition, subtraction, multiplication and division).

In Tools & Set Time Menu ...

1. Scroll to **Calculator**, press .
2. Enter a number (maximum 10 digits).
 - To enter a decimal, press .
3. Scroll/move to select calculation to perform.

Scroll up	Multiplication (x)
Scroll down	Division (/)
Move right	Addition (+)
Move left	Subtraction (-)

4. Enter next number.
 - If you scroll/move to select another calculation, the previous operation is performed with the result displaying on the top line.
5. Repeat steps 2 to 4 as needed for your calculation.
6. Press  (=) to display final calculation.

UNIT CONVERTER

Perform currency calculations based on a programmable conversion rate.

SETTING AN INITIAL CONVERSION RATE

In Tools & Set Time Menu ...

1. Scroll to **Unit Converter**, press  twice.
2. Enter an abbreviation for the home currency (up to 3 characters), press  twice.
3. Enter an abbreviation for the foreign currency (up to 3 characters), press  twice.
4. Enter the currency conversion rate, press  twice.

CALCULATING A CONVERSION

In Tools & Set Time Menu ...

1. Scroll to **Unit Converter**, press .
2. Verify that the displayed currency conversion is correct.
 - If you need to update the conversion, see “*Setting an Initial Conversion Rate*” on page 31.
3. Press  twice.
4. Enter value to convert, press  twice.

SWAPPING A CURRENCY CONVERSION

You can swap currencies to convert from the foreign currency into the home currency.

In Tools & Set Time Menu ...

1. Scroll to **Unit Converter**, press .
2. Verify that the displayed currency conversion is correct.
 - If you need to update the conversion, see “*Setting an Initial Conversion Rate*” on page 31.
3. Press  three times, scroll to **Swap**, press .
4. Enter value to convert, press  twice.

INFRARED PORT

Transfer data between your phone and other devices (that have an infrared port) using an infrared connection. A TV remote control sends infrared signals to your TV, VCR, etc. to control volume or change channels. Infrared also enables you to use GSM fax and data services, and provides access to the Internet and e-mail through existing applications.

Note: Downloaded files with a copyright cannot be transferred via infrared.

PREPARING AN INFRARED CONNECTION

Place your phone and the other device (with an infrared port) within the effective infrared range to each other. The infrared ports must face each other.

Verify that there are no obstructions between the two communicating devices.

- If the other device is a PC, you must set up the infrared connection on PC. (For example: Start > Settings > Control Panel > Infrared > Options tab > Enable Infrared Communication.)

SENDING IMAGES OR MUSIC DATA FROM YOUR PHONE

Note: Images and Music data can be transferred only between GU87 phones.

1. Verify that the infrared ports on both devices are facing each other, and other device is set to receive data.
2. In the Files & Setup Menu, scroll to **Data Files**, press , scroll to **Picture** or **Sound**, press .
3. Scroll to image or music data to send, press .
4. Scroll to **Send IrDA**, press 
 - To stop the transmission, press .

SENDING YOUR PROFILE DATA FROM YOUR PHONE

1. Verify that the infrared ports on both devices are facing each other, and other device is set to receive data.
2. In the Phonebook/V-Mail Menu, scroll to **Own Number/Info**, press . Scroll to **Own Number (SIM)** or **Personal Info**, press . Scroll to **Send IrDA**, press .

SENDING PHONEBOOK OR SCHEDULE DATA FROM YOUR PHONE

1. Verify that the infrared ports on both devices are facing each other, and other device is set to receive data.
2. In the Phonebook/V-Mail Menu or the Calendar Menu, select data to be sent, press , scroll to **Send IrDA**, press 
 - If you select data that cannot be forwarded or saved, your phone displays an error message.

SENDING AND RECEIVING FAXES

Please contact your wireless service provider to verify that this feature is available on your network.

1. You must install fax application software. The following fax applications are recommended for use with the GU87 phone:
 - Microsoft® Fax (www.Microsoft.com)
 - WinFax™ PRO or ProComm Plus (www.symantec.com)
 - HotFax® 5.0 (www.smithmicro.com)
2. When configuring your fax application, be sure to enter the area code and, for international calls, the country/region code.
3. Fax operation is the same procedure as “Connecting to the Internet” on page 34.

Receive Data

Set phone to receive data via the infrared port.

In Tools & Set Time Menu ...

1. Scroll to **Infrared Port**, press .
2. Press  (**Receive Data**).
 - Data is automatically received by phone.
3. To save the received data:

Phonebook	With received data displayed, press  , scroll to SIM Phonebook or Mobile Phonebook , press  . For SIM Phonebook , press  again. For Mobile Phonebook , scroll to group number, press  twice.
Scheduler	Press   .
Other data	Received data is automatically stored in the Received folder. See “Data Files” on page 65.

Connect Modem

Set phone to use a wireless modem connection.

USING THE INTERNET

1. Set up a dial-up account with an Internet Service Provider (ISP), for example, MSN®.
 - From your ISP, you need an installation CD or your account details (i.e. phone number, user name and

password) to configure Dial Up Networking within Windows®.

2. When setting up your Internet account for the first time, select GU87 as the connecting modem device.
 - For additional details, contact your ISP. For help using Windows Dial Up Networking, search Windows Help (Start>Help).

TO TEST THE INFRARED CONNECTION

Verify that your GU87 and your PC are properly connected.

Note: The following steps describe Windows standard communication software (HyperTerminal).

1. On your PC, select Start > Programs > Accessories > Communications > HyperTerminal.
2. Double click on HyperTerminal.
3. In the Connection Description dialog box, enter desired name in the Name field and click OK.
4. In the Phone Number dialog box, select the country/region code, enter your ISP's phone number and confirm that GU87 is selected in the "Connect using" box. Click OK.
5. When the connect dialogue box displays, click Cancel.
6. Select File > properties and verify that GU87 is selected. Click OK.
7. In the HyperTerminal window, type AT+CGMI and click.
 - If GU87 has successfully connected, you will receive an OK reply.

CONNECTING TO THE INTERNET

1. On your PC, select Start > Programs > Accessories > Communications > HyperTerminal.
2. Click on HyperTerminal.
3. On your phone, in the Tools & Set Time Menu, scroll to **Infrared Port**, press , scroll to Connect Modem, press .
4. On your PC, when "Ready for Communication" displays, enter AT command in HyperTerminal screen.
 - Enter phone number to connect to for Circuit Switching. Use the dedicated phone number for Packet connection.

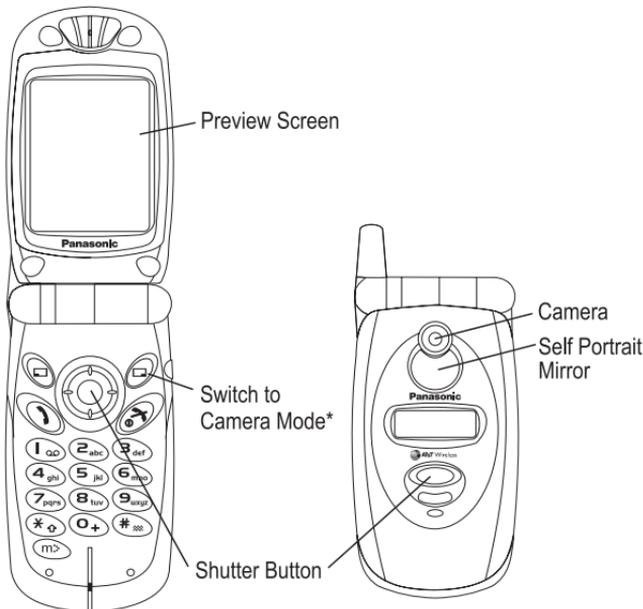
CAMERA MENU



To open the Camera Menu:

1. From standby, press  to open main menu display.
2. Scroll/move to highlight Camera Menu icon , press .

Note: Battery times are shorter when using the camera. To help conserve your battery, the phone automatically exits camera mode after 3 minutes if no activity is detected.



* From standby, pressing  to access the camera is the default setting for the  key. To change the setting, see “Short Cut Key” on page 74.

TAKE A PICTURE

1. Open flip and press .
OR
Open the Camera Menu ...
2. View image on preview screen (camera viewfinder).
 - Incoming calls override the preview screen.

- For best results, hold camera about 1 foot (30cm) away from subject.
 - For images to display clearly, use in temperature range of approximately 100°F (40°C) or less.
3. When desired image displays, press shutter button .
 4. To save picture in data folder, press shutter button .

OR

To return to camera operation without saving picture, press , then press shutter button .

- If there is an incoming call before you save the picture, it is temporarily saved. After the call, return to camera operation and complete step 4.
- Phone automatically exits camera mode after 3 minutes if no activity is detected. If this happens after step 3, return to camera operation and complete step 4.
- If phone is turned off, all temporarily saved images are deleted.

Take a Self-Portrait

1. Open flip and press .

OR

Open the Camera Menu ...

2. Close flip.
3. View yourself in the self-portrait mirror.
4. Press shutter button .
5. Open flip.
6. To save picture in data folder, press shutter button .

OR

To return to camera operation without saving picture, press , then shutter button .

Zoom (2x)/Wide

1. With image on preview screen, scroll up once to zoom.
 -  indicates zoom mode.
 - Image clarity is diminished slightly when zoomed.
2. Scroll down once to return to original (wide view) image.
 -  indicates wide mode.

Brightness

With image on preview screen, move (scroll) to the right to increase brightness or to the left to darken.

- Brightness setting may not work well in dark conditions.
-  indicates brightness range (-2 to +2).

PREVIEW SCREEN OPTIONS

Twilight Mode

Take a picture in low light.

In the Camera Menu  with image on preview screen...

1. Press  ().
2. Press  (**Twilight Mode**).
3. Scroll to **On** or **Off**, press .
 - If on, Twilight Mode remains on until you turn it off (repeat steps **1** to **3**) or until you exit the camera.

Close Up Mode

Take a close up shot.

In the Camera Menu  with image on preview screen...

1. Press  ().
2. Scroll to **Close Up Mode**, press .
3. Scroll to **On** or **Off**, press .
 - If on, Close Up Mode remains on until you turn it off (repeat steps **1** to **3**) or until you exit the camera.
 - Close Up may not work well in dark conditions.

Effect

Take a picture in sepia-tones, monochrome (black & white) or as a negative (reverse colors).

In the Camera Menu  with image on preview screen...

1. Press  ().
2. Scroll to **Effect**, press .
3. Scroll to desired effect, press .
 - The selected effect remains on until you turn it off (repeat steps **1** to **3**) or until you exit the camera.

Frame

Add a frame to a picture.

In the Camera Menu  with image on preview screen...

1. Press  ().
2. Scroll to **Frame**, press .
3. Scroll to desired frame, press .
 - Press  to briefly view a frame. The display automatically returns to list of frames to select.
 - The selected effect remains on until you turn it off (repeat steps **1** to **3**) or until you exit the camera.

Self Timer

Set a delay timer (10 seconds) for taking a picture.

In the Camera Menu  with image on preview screen...

1. Press  ().
2. Scroll to **Self Timer**, press .
3. Scroll to **On** or **Off**, press .
 - If on, the self timer remains on until you take a picture, until you turn it off (repeat steps 1 to 3) or until you exit the camera.
4. Once the self timer is on, press  to take a picture.
 - The timer ticks and the LED blinks for 10 seconds. A camera shutter sound plays when the picture is being taken.

Image Format

Select photo file type (JPEG Fine, JPEG Normal, JPEG Economy or PNG).

In the Camera Menu  with image on preview screen...

1. Press  ().
2. Scroll to **Image Format**, press .
3. Scroll to desired format, press .
 - The selected format setting remains until you change it (repeat steps 1 to 3).

Data Files

View images in data folder (where all saved pictures are stored).

In the Camera Menu  with image on preview screen...

1. Press  ().
2. Scroll to **Data Files**, press .
3. Scroll to Picture folder, press  (**Open**).
4. Scroll to desired files, press  or press  (**Menu**) for other options **View, Rename, Copy, Move, Delete** or **Property**.

MMS

Immediately send a photo by MMS (Multimedia Messaging Service).

In the Camera Menu  with image on preview screen...

1. Press  ().
2. Scroll to **MMS**, press .
3. Continue with step 3 in *“Create” on page 41* to create an MMS message.

GAMES MENU



Warning: Battery times will be shorter when playing games (because backlighting is constant).

To open the Games Menu:

1. From standby, press to open main menu display.
2. Scroll/move to highlight Games Menu icon , press .

TETRIS®

Fill in lines (rows) with block shapes.

Tetris®, © Elorg 1987.
Tetris Logo by Roger Dean; © The Tetris Company 1997
All Rights Reserved.

In Games Menu ...

1. Press (**TETRIS®**).
2. Press to enter game menu.
3. Scroll to desired game (**Endless, 99 Line Attack, 99K Pts Attack**), press .
4. Move using navigation key, or use 2, 4, 6, and 8 keys to move blocks. Press to rotate blocks.

Notes:

- Select **Options** from game menu to see score records or clear hi-score.
- To turn off sound, see *“All Sounds” on page 69*.

HERDING SHEEP

Move the sheep dog to herd sheep into their pen.

In Games Menu ...

1. Scroll to **Herding Sheep**, press .
 - Press for help screen.
2. Scroll to desired game level, press .
 - Select **Score** to view or clear score information.
3. Press to begin game.
4. Move using navigation key, or 2, 4, 6, and 8 keys.

Notes:

- Press to pause and turn sound on/off. Press to resume play.
- Press to exit.

MESSAGES MENU



SMS: Short Message Service allows you to send and receive text messages to mobile phones on the same network or any network that has a roaming agreement.

MMS: Multimedia Messaging Service allows you to attach images and music to text messages. The recipient can play it as a slide show (multimedia). MMS messages can be sent to another mobile phone with MMS capability or to an e-mail address.

e-mail: Create and send an e-mail message.

To open the Messages Menu:

1. From standby, press  to open main menu display.
2. Scroll/move to highlight Messages Menu icon , press .

MMS

Multimedia Messaging Service allows you to attach images and music to text messages. The recipient can play it as a slide show (multimedia). MMS messages can be sent to another mobile phone with MMS capability or to an e-mail address.

When you receive an MMS message notice, the message notice indicator () displays, along with an audible tone or vibration. Continue with *“Inbox” on page 43*.

SETTING THE PHONE FOR MULTIMEDIA MESSAGING

Before you can send a message, you must program the Message Center number (issued by your wireless service provider). See *“Settings” on page 49*. The Message Center number may be preprogrammed on the SIM card.

Create

Write an MMS message.

In Messages Menu ...

1. Press  (**MMS**).
2. Press  (**Create**).

3. Scroll to desired option, press .

Add Image	Scroll to folder, press  , scroll to image, press  . Press  to continue adding to message.
Add Text	Enter message text, press  twice to save. See <i>"Appendix A: Text Entry" starting on page 91</i> . If you are in an alphabet entry mode, you can enter a preset user message. To edit an existing message, see <i>"Preset Messages" on page 75</i> .
Add Sound	Scroll to folder, press  , scroll to sound file, press  . Press  to continue adding to message.
Slide Time	Enter time (1 to 30 seconds).
Text (color)	Move to desired color, press  .
Background	Move to desired color, press  .

4. When you finish adding files and text, press  (**Ok**) to go to address screen.

5. Scroll up to **To:** line, press  (**Edit**), To List appears.

- To enter a phonebook address, press , scroll to desired recipient, press , scroll to **Recall**, press .
- Press  (**Menu**), scroll to **Add**, press  to enter a phone number or e-mail address.

6. Press  (**Menu**) scroll to desired option:

Accept	Save recipient entry and continue creating your Multimedia Msg.
Add	Enter another recipient address.
Edit	Edit recipient entry.
Delete	Press  to delete recipient entry.

7. If desired, scroll to **Cc:** to send a copy to another recipient. Or scroll to **Bcc:** to send a blind copy.

8. Scroll to **Subj:**, press , enter subject, press  twice.

9. When you finish the message and return to the Create screen, press  (**Menu**).

10. Scroll to desired option, press .

Send	Sends message to recipient(s). A copy is saved in the outbox.
Save	Saves message in outbox. Message can be edited or sent at a later time.
Slide Show	Plays images, sounds, and text so you can verify the message before sending.
Other Options	<p>Resend Attempts: Scroll to Maximum or Custom, press .</p> <p>Send ID: Scroll to Hide or Show, press .</p> <p>Report: Scroll to Yes or No, press .</p> <p>Delivery Time: Enter time (in hours), press .</p>

Inbox

First choose if you want to receive an MMS message, then download it to your phone. Inbox stores MMS message notices and messages you have received.

In Messages Menu ...

1. Press  (**MMS**).
2. Scroll to **Inbox**, press .
3. Scroll to **Noticebox** (number of notices appears), press .
4. Scroll to desired notice header and press  (**Menu**) for these options:

Receive	Press  to receive message. When complete, message moves to Receivebox. Press  (Cancel) to stop message transmittal.
Reject	Press  to reject message.
Receive All	Press  , then press  (Menu) to select which messages to receive.
Sort	Press  , then select Date, Address or Size.
Phonebook	Press  , then select SIM Phonebook or Mobile Phonebook to save to.
Protect	Press  to protect message from being overwritten.
Display	Press  to choose whether messages are displayed by Subject or Address.
Delete	Press  twice to delete.
Status	Press  to view number of notice, received and unused messages.

To read messages in the Receivebox:

1. Press  (**MMS**).
2. Scroll to **Inbox**, press .
3. Scroll to **Receivebox** (number of unread messages appears), press .
4. Press  twice to play the message (view images or slideshows), or press  (**Menu**) once for these options:

Sort	Press  , then select Date, Address or Size.
Phonebook	Press  , then select SIM Phonebook or Mobile Phonebook to save to.
Protect	Press  to protect message from being overwritten.
Display	Press  to choose whether messages are displayed by Subject or Address.
Delete	Press  twice to delete.
Status	Press  to view number of notice, received and unused messages.

Outbox

Outbox stores sent messages and draft messages (waiting to be sent) that you have created.

In Messages Menu ...

1. Press  (**MMS**).
2. Scroll to **Outbox**, press .
3. Scroll to desired option.

Sent	Press  to view a list of sent messages. Scroll to desired message, press  to view the message. Or, press  (Menu) for more options.
Draft	Shows messages that have not been sent. Scroll to message, press  (Menu) for options (Send , Send All , Sort , Phonebook , Protect , Display , Delete , and Status). Or, press  to view message.
Pending	Shows messages which failed during sending (i.e., broken connection prevented sending, etc...)

Server List

You must configure MMS on your phone before sending or receiving MMS messages. Your wireless service provider will supply the configuration information.

In Messages Menu ...

1. Press  (**MMS**).
2. Scroll to **Server List**, press .
3. Scroll to an empty server profile, press 
 - Create up to 3 servers.
 - Choose Server Auto to automatically set.
4. Scroll to **Edit**, press .
5. Profile Name is highlighted, press  (**Edit**) and enter the Profile Name, press  twice.
6. Scroll to **Server URL**, press . Enter url, press  twice.
7. Scroll to **Gateway IP**, press . Enter IP address, press  twice.
8. Scroll to **Bearer Type**, press . Scroll to **Circuit Switch** or **GPRS**, press  twice.

To choose a desired server profile, go to the Server List, scroll to desired server name, press  twice to set.

Settings

Personalize MMS message settings in your phone.

In Messages Menu ...

1. Press  (**MMS**).
2. Scroll to **Settings**, press .
3. Scroll to desired option, press .

Font Size	Scroll to desired font (text) size, press  .
Display	Scroll Inbox or Outbox , press  . Scroll to Subject or Address , press  .
Send Settings	Scroll to desired option (Resend Attempts , Send ID , Report), press  .
Reset Snd Setgts	Return all Send Settings to default. Press  to reset to default.
Receive Settings	Set to receive or reject a message from an anonymous sender. Press  , scroll to Accept or Reject , press  .
Report Allowed	Scroll to Permit or Reject , press  .
Auto Reception	Scroll to Enable or Disable , press  .
Player Mode	Scroll to Automatic or Manual , press  .

SMS

You can send and receive text messages (up to 160 characters) to mobile phones on the same network or any network that has a roaming agreement. A message is sent as a single message, but may be received as up to 3 messages (depending on the recipient's phone settings).

When you receive an SMS message, the message indicator () displays, along with an audible tone or vibration. When **Read** displays, press  to read the message. Scroll up and down to view the message.

SETTING THE PHONE FOR SHORT TEXT MESSAGING

Before you can send a message, you must program the Message Center number (issued by your wireless service provider). See “*Settings*” on page 49. The Message Center number may be preprogrammed on the SIM card.

Create SMS

Write an SMS message to send to another mobile phone.

In Messages Menu ...

1. Scroll to **SMS**, press .
2. Press  (**Create SMS**).
3. Enter desired message text, or press  (**Menu**) for options Copy, Cut, Paste, User Msg. (common phrases), Char. List, Input Mode, or Cancel.
4. When finished, press  (**Ok**) for send options.
5. Enter destination mobile phone number, press  twice.
6. Press  (**Menu**) and select **No** or **Yes** to request delivery confirmation, press  to send.

Create E-SMS

Write an SMS message to send to an e-mail address.

In Messages Menu ...

1. Scroll to **SMS**, press .
2. Scroll to **Create E-SMS**, press .
3. Enter desired message text, or press  (**Menu**) for options Copy, Cut, Paste, User Msg. (common phrases), Char. List, Input Mode, or Cancel.
4. When finished, press  twice (**Menu>Ok**) and enter subject, press  twice.
5. Enter destination e-mail address, press  twice.
6. Press  (**Ok**) to send.

Inbox

Inbox stores messages you have received. You can reply, create new, forward, chat, move or delete messages.

In Messages Menu ...

1. Scroll to **SMS**, press .
2. Scroll to **Inbox**, press 
 - A list of read  messages, unread  messages and E-SMS messages  displays.
3. Scroll to desired message and press  (**Menu**) for these options:

Read	Press  . Scroll up and down to read entire message, including Sender and Message Center number. Or, press  (Menu) for submenu options (Create* , Reply , Forw'd , Chat , Move , or Delete). When Sender displays, press  to add contact data to the phonebook if desired.
Reply	Enter text, then press  twice to send.
Forw'd	Press  . Edit message, then press  three times. Enter destination number, press  twice.
Chat	Continue with step 4 in " <i>Chat SMS</i> " on page 48.
Move	Move message between SIM card and Mobile inbox.  indicates stored in SIM card inbox,  indicates stored in Mobile inbox.
Delete	Press  twice to delete.

- **Create*** option. If there is a phone number or e-mail address in the message, you can create a new message to automatically send to this destination.
- While in Read option, if there is a phone number or e-mail address within the text, you can press  to add it to the phonebook.
- While in Read option, if there is a phone number in the message, press .

Outbox

Outbox stores sent messages and draft messages (waiting to be sent) that you have created. You can edit, send, read, chat, create or delete messages.

In Messages Menu ...

1. Scroll to **SMS**, press .
2. Scroll to **Outbox**, press .
 - A list of sent  and draft  messages displays.
3. Scroll to desired message and press  (**Menu**) for these options:

Edit	Press  to edit text. Press  (Menu) for more editing options.
Send	Press  twice, enter destination, press  .
Read	Press  . Scroll up and down to read entire message, including Destination and Message Center number. Or, press  (Menu) for submenu options (Create* , Send , Edit , Chat , Move , or Delete). When Destination displays, you can press  to add it to the phonebook.
Chat	Continue with step 4 in "Chat SMS" on page 48.
Move	Move message between SIM card and Mobile outbox.  indicates stored in SIM card outbox,  indicates stored in Mobile outbox.
Delete	Press  twice to delete.

- **Create*** option. If there is a phone number or e-mail address in the message, you can create a new message to automatically send to this destination.
- While in Read option, if there is a phone number or e-mail address within the text, you can press  to add it to the phonebook.
- While in Read option, if there is a phone number in the message, press  to dial the number.

Chat SMS

Read chat messages (sent and received) on one screen when in Chat SMS mode with someone else.

In Messages Menu ...

1. Scroll to **SMS**, press .
2. Scroll to **Chat SMS**, press .
3. Enter destination phone number, press  twice.
4. Enter your Nickname (up to 18 characters), press  twice.
5. You can now Chat with the other party (they must have chat SMS on their phone). Enter your message, or

press **⊙** (**Menu**) for more options. When finished, press **⊙** twice.

- When receiving a chat message, text automatically appears above your previous message.
6. To continue chatting, press **⊙**, scroll to **Ok**, press **⊙**.
 - If the phone is not in chat mode when receiving a chat message, it is received as an SMS message.
 - If a voice call is received when in chat mode, you can answer the incoming call and return to chat mode at the end of the call.
 7. To exit chat mode, press **⊙**, scroll to **Exit**, press **⊙**.
 - When save is selected, the last sent message is stored in the Outbox.
 - All other messages are automatically deleted.

Status

Review how many SMS messages are stored in the SIM card and in the Mobile.

In Messages Menu ...

1. Scroll to **SMS**, press **⊙**.
2. Scroll to **Status**, press **⊙**.
3. Select **SIM Message** or **Mobile Message**, press **⊙** to view number of messages used.

Settings

Create recipient group lists to send one message to up to 10 recipients at once. You can also automatically delete messages, set the amount of delivery attempts, and view the message center number.

The actual options that appear may vary depending on your wireless service provider.

In Messages Menu ...

1. Scroll to **SMS**, press **⊙**.
2. Scroll to **Settings**, press **⊙**.
3. Scroll to desired option, press **⊙**.

Recipient Groups

Create a recipient group list to send one message to up to 10 destinations at once (5 recipient groups, with 10 destination positions each).

1. To enter a new Group name, select an empty slot, press **⊙** twice, press **⊙** (**Entry**).
2. Scroll to select name from phonebook (must have phone number entry), press **⊙** three times.
3. Press  to add more names to the group.
4. When finished, press , then press **⊙** (**Menu**), scroll to **⊙** (**Rename**) and enter Group Name. Press **⊙** twice to Save.

Auto Delete	Set to automatically erase messages. Received Read overwrites oldest read message. Received Any overwrites oldest message, regardless of whether it has been read or not.
Message Center#	Enter message center number in international dial format. See <i>“Setting the Phone for Short Text Messaging”</i> on page 46. Also see <i>“International Dialing”</i> on page 19. The message center number may be preprogrammed on the SIM card.
Report	Select Yes , No , or Ask to confirm delivery.

Broadcasts

These are messages broadcast by the networks to all GSM customers. They provide general information about topics such as weather reports, traffic news, and customer services.

In Messages Menu ...

1. Scroll to **SMS**, press .
2. Scroll to **Broadcasts**, press .
3. Scroll to desired option, press .

Receive	Select On or Off to receive broadcast messages.
Message List	Scroll to desired message headers and press  to view or delete broadcast message.
Topics	Press  four times to insert desired topics supplied by your wireless service provider. Press  (Menu) for options Insert , Edit , Delete or Ok .
Language	If offered by your wireless service provider, broadcast messages can be shown in more than one language. Select desired language.

E-MAIL

Send and receive Internet e-mail messages via an ISP that supports POP3/SMTP protocols.

When you receive an e-mail message, the message indicator (✉) displays, along with an audible tone or vibration. When Read displays, press ● to read the message. Scroll up and down to view the message.

STORE AN ADDRESS

An e-mail address can be stored in the Mobile Phonebook. See “*Mobile Phonebook*” on page 59.

MANAGE MESSAGE STORAGE

Once the Inbox and/or Outbox are full, any new messages (received or created) will overwrite existing messages from the oldest first. To prevent messages being overwritten, delete messages which are no longer required. Lock important messages so they will not be overwritten.

Create

Write an e-mail message.

In Messages Menu ...

1. Scroll to **e-mail**, press ●.
2. Press ● (**Create**).
3. At highlighted **To:** line, press ● (**Edit**), To List appears.
 - To enter a phonebook e-mail address, press , scroll to desired recipient, press ● four times.
4. If desired, press ● twice (**Edit>Menu**) for these options:

Ok	Save recipient entry and continue creating your e-mail message.
Add	Enter another recipient address.
Edit	Edit recipient entry.
Delete	Delete recipient entry.

5. If desired, scroll to **Cc:** to send a copy to another recipient. Or scroll to **Bcc:** to send a blind copy.

6. Scroll to **Subj.**, press (**Edit**), enter subject, press twice.
7. **File:** allows you to attach a file from your Data Files to the e-mail message.
8. Scroll to **Message:**, press (**Edit**), enter text, press twice.
9. When you finish the message and return to the Create screen, press (**Menu**).
10. Scroll to desired option, press .

Send	Sends message to recipient(s). A copy is saved in the outbox.
Save	Saves message in outbox. Message can be edited or sent at a later time.

Inbox

Inbox stores e-mail messages you have received.

In Messages Menu ...

1. Scroll to **e-mail**, press .
2. Scroll to **Inbox**, press .
 - A list of messages headers displays.

These icons indicate the current state of each message:

	read or sent message
	unread or unsent message
	message has been locked
	message has attached files

3. Scroll to desired message and press (**Menu**) for these options:

Read	Press . Scroll up and down to read entire message, including Sender and Message Center number. Or, press (Menu) for submenu options (Create* , Reply , Forw'd , Chat , Move , or Delete). When Sender displays, press to add contact data to the phonebook if desired.
Reply	Compose a reply to the sender.
Reply to All	Compose a reply to all recipients of the message.

Forw'd	Send the message to a person other than the sender.
Delete	Remove the current message from the list.
Protect	Apply a lock to the message so that it cannot be overwritten when receiving/creating further messages. A locked message can still be deleted manually.

- While in Read option, if there is a phone number or e-mail address within the text, you can press  to add it to the phonebook.

Outbox

Outbox stores sent messages and draft messages (waiting to be sent) that you have created. You can edit, send, read, or delete messages.

In Messages Menu ...

1. Scroll to **e-mail**, press .
2. Scroll to **Outbox**, press .
 - A list of sent  and draft  messages displays.
3. Scroll to desired message and press  (**Edit**) to begin editing the message. Or, press  (**Menu**) for these options:

View	Press  to view message text. Press  (Edit) for editing options.
Send All	Press  twice, enter destination, press  .
Make	Press  twice to make a phonebook entry.
Sort	Press  , then select Status, Date, or Address.
Display	Scroll to Subject or Address display pattern, press  .
Delete	Press  twice to delete.
Delete All	Press  twice to delete.
Property	Press  to view e-mail size in KB.

4. To send a completed message, press  (**Menu**), then **Send**. Or, scroll to **Save** and press  to save to the Outbox.

Server List

Before you can send and receive e-mail messages, your SIM card must be data enabled and a contract must be set up with an Internet Service Provider and the relevant configuration information, supplied by the provider, entered into the phone.

In Messages Menu ...

1. Scroll to **e-mail**, press .
2. Scroll to **Server List**, scroll to an empty profile and press  (**Create**).
 - Up to three Internet Service Providers may be set up.
3. Scroll to each parameter and enter the information.

Profile Name	Bearer Type
Mail Address	Primary DNS
SMTP Setting	Secondary DNS
POP3 Setting	

4. After all parameters have been entered, press  (**C**) to return to the previous menu level.
5. Select the server setting that you have just edited and press  (**Menu**). Press  (**Set**).
Note: Record your e-mail settings in the table at the rear of this booklet for easy reference.

Settings

Set e-mail sending preferences and view status of e-mail memory.

In Messages Menu ...

1. Scroll to **e-mail**, press .
2. Scroll to **Settings**, press .
3. Select **Send Settings** by pressing .

Recipient Groups	Same as Recipient Groups in SMS messaging. See "Settings" on page 49.
Signature	Add an automatic signature to your e-mail messages. Select Signature Setting to turn it on or off.
Auto Quote	Enables you to attach text from the message that you are replying to. Set to On or Off.

4. To view **Status**, scroll to **Status** and press . Shows total number of e-mail memory, vacant memory and number of protected, unread and used messages.

Send/Receive

The Send/Receive function is used to both send messages created on the phone to the server of the Internet Service Provider and to check your mailbox on the server for incoming messages and download them to the phone at the same time.

In Messages Menu ...

1. Scroll to **e-mail**, press .
2. Scroll to **Send/Receive**, press .

 - If there are unsent messages in the Outbox, you will be prompted to send them.

3. Press .

 - If there are new messages to download to the phone, then you will be prompted to receive them.

4. Press .

 - If no action is taken, the connection will time out after one minute.
 - If any messages are downloaded then, when finished, the phone will display the new messages allowing them to be viewed, replied to, etc.... If no messages are downloaded, the phone will display the Inbox menu, unless there are no messages in this list, then it will return to the e-mail menu.

PHONEBOOK/V-MAIL MENU



To open the Phonebook/V-Mail Menu:

1. From standby, press to open main menu display.
2. Scroll/move to highlight Phonebook/V-Mail Menu icon , press .

The phonebook stores information in either the SIM Phonebook or the Mobile Phonebook. The SIM Phonebook is best used for information you might want to take with you if you transfer your SIM card to a different phone. Each SIM Phonebook entry contains a name and one phone number. The Mobile Phonebook information stays in your phone, unless you send it to another device with IrDA (infrared) capability. In a Mobile Phonebook entry, you can save information such as e-mail addresses, up to 3 phone numbers, unique ring tones, graphics and colors.

SEARCH

By Name

Review stored entries sorted by name.

In Phonebook/V-Mail Menu ...

1. Press twice (**Search > By Name**).
2. Scroll to **All Phonebook** (review both phonebooks), **SIM Phonebook**, or **Mobile Phonebook**, press .
3. Scroll to desired entry, press .
 - Press a lettered key to move to that letter in the list.
4. Scroll to desired option, press .

View	Shows list of entered information for an entry by category.
Detail	Each category of an entry appears on a separate page. Scroll to view all categories.
Recall	Recalls the entry's phone number to the screen to dial. Press to dial number. Warning: Pressing erases the number. To cancel without changes, press or .
Edit	Edit entry as needed. See "Create" on page 58.

Delete	Press  to delete the entry.
Create	Create new phonebook entry for this name. See <i>"Create" on page 58</i> .
Send IrDA (Infrared)	Send entry information to another device with an infrared port. See <i>"Infrared Port" on page 32</i> .

By Location

Review stored entries sorted by location number.

In Phonebook/V-Mail Menu ...

1. Press  (**Search**).
2. Scroll to **By Location**, press .
3. Press  for **SIM Phonebook** or scroll to **Mobile Phonebook**, press .
4. Enter location number where desired entry is stored, press  (**Ok**).
5. Press  (**Menu**), continue with step 4 in *"By Name" on page 57*.

CREATE

SIM Phonebook

Save names with numbers in the SIM Phonebook (stored on SIM card).

The number of SIM Phonebook locations varies based on your SIM card.

 indicates a SIM Phonebook entry.

In Phonebook/V-Mail Menu ...

1. Scroll to **Create**, press .
2. Press  twice (**SIM Phonebook** > name icon .
3. Enter name. Press  twice to save.
 - See *"Appendix A: Text Entry" on page 91*.
4. Scroll to phone number icon , press .
5. Enter phone number. Press  twice to save.
6. To save in a specific location, press  (**Save**), enter location number, press .

OR

To save in next available location, press  (**Any**). (Location number displays on lower left.)

- If location is occupied or memory is full, display prompts you to overwrite or select another location. Press  (**C**) to select another location.
- Stored numbers can be transferred to another phone by inserting your SIM card in another phone.
- SIM entries cannot be grouped.

- If you edit an entry that has voice dial, you must delete the voice dial and record a new one. See “Add/Play/Delete” on page 60.

Mobile Phonebook

Save up to 200 names with numbers and other information, including e-mail addresses, unique ring tones, graphics and colors, etc....

 indicates a Mobile Phonebook entry.

In Phonebook/V-Mail Menu ...

1. Scroll to **Create**, press .
2. Scroll to **Mobile Phonebook**, press .
3. Press  (name icon .
4. Enter name. Press  twice to save.
 - See “Appendix A: Text Entry” on page 91.
5. Scroll to phone number icon , press .
6. Enter phone number. Press  twice to save.
7. Scroll to desired picture icon (representing type of phone number such as home number, business number), press .
8. Continue to scroll, select and save information:
 -  Phone numbers (up to 3 per entry)
 -  E-Mail address (up to 2 per entry)
 -  Unique ring for this caller
 -  Photo/graphic to be stored for display
 -  Add entry to a group
 -  Add note
 -  Unique sub LCD color for this caller
9. To save in a specific location, press , enter location number (1-200), press .

OR

To save in next available location, press  (**Any**). (Location number displays on lower left.)

- If location is occupied or memory is full, display prompts you to overwrite or select another location. Press  (**C**) to select another location.
- Saved entries remain in the Mobile Phonebook even if you change the SIM card.

VOICE DIALING

Add/Play/Delete

Program phone to dial calls when you say a pre-recorded name. You can program up to 10 voice dial entries.

Note: Before recording a voice dial entry, the name and number must be stored in the phonebook. See “Create” on page 58.

Note: For best results, recording should take place in a quiet location.

ADDING/RECORDING A VOICE DIAL ENTRY

In Phonebook/V-Mail Menu ...

1. Scroll to **Voice Dialing**, press .
2. Press  (**Add/Play/Delete**).
3. If no entries have been recorded yet, press  (**Add**) once.

OR

If entries have been recorded, press  twice (**Menu>Add**).

4. Scroll to desired phonebook entry, press .
5. Scroll to **Recall**, press .
6. Please Record Your Voice! displays.
7. Hold phone about eight inches from your mouth, press  (**Ok**), and say name for selected phonebook entry.
 - A recording can be up to 5 seconds in length.
8. When prompted, press , repeat voice recording.
 - If recording is unsuccessful, repeat steps 7 to 8.
 - To call using voice dial, see “Voice Dialing” on page 18.

PLAYING OR DELETING A VOICE DIAL ENTRY

In Phonebook/V-Mail Menu ...

1. Scroll to **Voice Dialing**, press .
2. Press  (**Add/Play/Delete**).
3. Scroll to desired phonebook entry, press .
4. Scroll to **Play** or **Delete**, press 
 - If you select **Delete**, press  to confirm deletion.
 - If you update a phonebook entry that has a voice dial entry, you must delete and re-record the voice dial entry for it to work properly. Otherwise it will dial the old number.

Auto Dial Enable

Set phone to automatically call entries after you recall a voice entry.

In Phonebook/V-Mail Menu ...

1. Scroll to **Voice Dialing**, press .
2. Scroll to **Auto Dial Enable**, press .
3. Scroll to **Enable** (allow automatic dialing) or **Disable** (must press  before voice recorded entry is called), press .

CALLER ID ALERT

Identify callers with a particular ring tone, display picture/animation, and/or sub display color, making it easier to distinguish between callers or groups of callers.

In Phonebook/V-Mail Menu ...

1. Scroll to **Caller ID Alert**, press .
2. If no Caller ID Alert has been assigned, press  to insert an initial **Caller ID Alert**. Or, press  twice (**Menu>Insert**) to insert a new **Caller ID Alert**.
3. Scroll to **Personal** or **Group**, press .
4. Scroll to desired entry, press .
5. Press  to **Recall**.
6. Scroll to desired setting, press .

	Ring type	Press  (Edit), scroll to folder, press  , scroll to tone, press  . (Operation varies based on if this is a new entry, adding an entry or a personal/group entry.)
	Photo, graphic or animation	Press  (Edit), scroll to folder, press  , scroll to image, press  .
	Sub LCD color	Press  (Edit), scroll to color, press  .

7. Press  (**Save**) to save.

GROUP NAMES

Create group names, for example, business and personal. Each group can be titled for quick access to entries. An alert profile can be set for a group.

In Phonebook/V-Mail Menu ...

1. Scroll to **Group Names**, press .
2. Scroll to group <1> to <9>, press  (**Menu**).
3. Scroll to **View** or **Edit**, press :

View	Shows contents of group.
Edit	Enter group name, press  . Press  to clear number then enter the group name. Press  twice to save group name.

4. To add phonebook entries to a group, see *"Mobile Phonebook"* on page 59.

STATUS

Review how many locations are available in the Phonebooks.

In Phonebook/V-Mail Menu ...

1. Scroll to **Status**, press .
2. Scroll to **SIM Phonebook** or **Mobile Phonebook**, press .

OWN NUMBER/ INFO

Store your own contact information, which you can then send to other infrared (IrDA) devices - similar to an electronic business card.

In Phonebook/V-Mail Menu ...

1. Scroll to **Own Number/Info**, press .
2. To save your profile in the SIM memory, press  [**Own Number (SIM)**]. Go to step 3.

OR

To save your profile in the phone memory, scroll to **Personal Info**, press  twice and enter information. See *"Mobile Phonebook"* on page 59.

3. Press  twice and scroll to desired option, press :

View	Shows how your profile displays.
Detail	Shows your saved profile information.
Edit	Update profile as desired. See <i>"Create"</i> on page 58. Press  to save changes.
Delete	Press  to delete your profile.
Create	Create new profile. See <i>"SIM Phonebook"</i> on page 58.
Send IrDA	Send your profile to another device with an infrared port. See <i>"Infrared Port"</i> on page 32.

SERVICE DIAL

Call your wireless service provider. This feature appears only if offered by your wireless service provider.

VOICE-MAIL

You must subscribe to voice mail through your wireless service provider before you can retrieve voice mail messages. To check if voice mail has been programmed, press and hold . If the display indicates that the voice mail box number is empty, voice mail has not been programmed. Contact your wireless service provider for programming instructions.

In Phonebook/V-Mail Menu ...

1. Scroll to **Service Dial**, press .
2. Press  to dial your wireless service provider.

LISTENING TO VOICE MAIL MESSAGES

When a new voice mail message is received, an alert sounds and  appears in the sub and main displays.

1. Press and hold  to dial your voice mail message center.
OR
Press  and  to dial your voice mail message center.
2. Follow the prompts to listen to your voice mail messages.

TO VIEW OR ENTER THE VOICE MAIL MESSAGE CENTER NUMBER

In Phonebook/V-Mail Menu ...

1. Scroll to **Voice-Mail**, press .
2. Press  (**Voice Mail**).
3. Scroll to desired option, press .

View	View the voice mail center phone number.
Detail	Scroll to Name and Number information.
Edit	Enter the voice mail center phone number. Only appears if number has not been furnished by your wireless service provider.
Recall	Recall phone number to the screen and press  to dial.

SPEED DIAL SETUP

Set phone to quickly dial phone numbers stored in Phonebook locations 2 to 9. You must choose either the SIM phonebook or the Mobile phonebook.

Note: Some speed dial keys may be reserved by your wireless service provider. For example, the  key may be assigned to voice mail for one-touch voice mail retrieval. If so, you will not be allowed to overwrite it.

In Phonebook/V-Mail Menu ...

1. Scroll to **Speed Dial**, press .
2. Scroll to **Disable** (no speed dialing), **SIM Phonebook** (use SIM Phonebook entries for speed dialing), or **Mobile Phonebook** (use Mobile Phonebook entries for speed dialing), press 
 - If you set **SIM Phonebook** or **Mobile Phonebook**, see “*Speed Dialing*” on page 18 to make a call.

Note: If your wireless service provider offers Service Dial, then Service Dial will appear as one of the Source List options within the Speed Dial setup feature.

FILES & SETUP MENU



To open the Files & Setup Menu:

1. From standby, press to open main menu display.
2. Scroll/move to highlight Files & Setup Menu icon , press .

DATA FILES

Storage area for personal information and files such as pictures, sounds and e-mail.

The Data File folder types are as follows:

Data File folder Types:	Contents of Data Files:
Picture	Photos
Sound	Sounds (including melody compositions and voice recordings)
Mail	E-mail messages
Download	Downloaded files
Received	Data received via infrared
Phonebook	Phonebook entries
User 1 to User 5	Varies -- you can customize each of these five folders
Notes:	
<ul style="list-style-type: none">• Maximum file size: 50kb• Maximum number of files: 900• Maximum storage capacity of all data folders together: 1MB• Only files in supported file formats can be viewed.• Changing the SIM card does not affect your stored data.	

View Folders

Display, edit and delete your saved data (photos, sounds, attached files, etc...). Actions can be performed for an entire folder or for individual files within a folder.

VIEW FOLDER IMAGES AS A SLIDE SHOW

In Files & Setup Menu ...

1. Press twice (**Data Files>View Folders**).
2. Scroll to desired folder to view slide show.
3. Press (**Menu**).
 - Slide show is not available for sound files.
4. Press to select **Slide Show**.
 - Each image displays for five seconds.
 - To skip image, press any key except scroll or .

- Slide show stops after one cycle or press  .

VIEW FOLDER PROPERTIES

In Files & Setup Menu ...

1. Press  twice (**Data Files>View Folders**).
2. Scroll to desired folder.
3. Press  (**Menu**).
4. Scroll to **Property**, press .

RENAME FOLDER

This option is only available for User 1, User 2, User 3, User 4, and User 5 folders.

In Files & Setup Menu ...

1. Press  twice (**Data Files>View Folders**).
2. Scroll to desired folder (User 1 to User 5).
3. Press  (**Menu**).
4. Press  (**Rename**).
5. Press  (**C**) to clear, then enter name, press  twice.
 - See “Appendix A: Text Entry” on page 91.
 - Do not use special characters in the folder name.

VIEW FILE

In Files & Setup Menu ...

1. Press  twice (**Data Files>View Folders**).
2. Scroll to desired folder, press  (**Open**).
3. Scroll to desired file, press  (**View**) for picture files, (**Play**) for sound files.

EDIT FILE

In Files & Setup Menu ...

1. Press  twice (**Data Files>View Folders**).
2. Scroll to desired folder, press  (**Open**).
3. Scroll to desired file, press  (**Menu**).
4. Scroll to **Edit Image**, press .
 - Press  (**Edit**) for editing options. See:
 - “Brightness” on page 37
 - “Effect” on page 37
 - “Frame” on page 37
 - “Image Size”: To change width, press  twice (Menu>Edit). Enter width and press  twice. To

change height, scroll to **Height**, press  twice (Menu>Edit). Enter height and press  twice. *"Image Format" on page 38.*

- You cannot edit polyphonic ringtones, music files, or files that cannot be forwarded or saved.

COPY AND PASTE FILE

In Files & Setup Menu ...

1. Press  twice (**Data Files>View Folders**).
2. Scroll to desired folder, press  (**Open**).
3. Scroll to desired file, press  (**Menu**).
4. Scroll to **Copy**, press .
5. Scroll to folder to paste file, press .
 - You can copy/paste within same folder.
 - Forwarded or saved files can not be copied/pasted.
 - Copied/pasted files can be saved only into folders for the same file types.

MOVE FILE

In Files & Setup Menu ...

1. Press  twice (**Data Files>View Folders**).
2. Scroll to desired folder, press  (**Open**).
3. Scroll to desired file, press  (**Menu**).
4. Scroll to **Move**, press .
5. Scroll to folder to move file, press .
 - Files can be moved only into folders for the same file types.

DELETE FILE

In Files & Setup Menu ...

1. Press  twice (**Data Files>View Folders**).
2. Scroll to desired folder, press  (**Open**).
3. Scroll to desired file, press  (**Menu**).
4. Scroll to **Delete**, press  twice.
 - If the file is used for other features, such as Wallpaper, press  again to delete the file.

RENAME FILE

In Files & Setup Menu ...

1. Press  twice (**Data Files>View Folders**).
2. Scroll to desired folder, press  (**Open**).

3. Scroll to desired file, press  (**Menu**).
4. Scroll to **Rename**, press .
5. Press  (**C**) to clear existing name, Edit name, press  twice.
 - See “Appendix A: Text Entry” on page 91.

ATTACH FILE TO AN MMS OR E-MAIL

In Files & Setup Menu ...

1. Press  twice (**Data Files>View Folders**).
2. Scroll to desired folder, press  (**Open**).
3. Scroll to desired file, press  (**Menu**).
4. Scroll to **MMS**, press .
 - To create and send an MMS message, see “Create” on page 41.
 - To create and send an e-mail message, see “Create” on page 51.
 - You cannot attach polyphonic ringtones, music files, or files that cannot be forwarded or saved.

TRANSFER FILE VIA IRDA (INFRARED)

In Files & Setup Menu ...

1. Press  twice (**Data Files>View Folders**).
 2. Scroll to desired folder, press  (**Open**).
 3. Scroll to desired file, press  (**Menu**).
 4. Scroll to **Send IrDA**, press .
 - The phone transmits the file. If the file does not transfer, you have the option to retry sending. Check the set up for the other device.
- **Note:** The receiving device must be set to receive data.
 - **Note:** If you receive an image via IrDA, the file is stored in the Received folder.
 - **Note:** Downloaded data which is copyrighted cannot be transferred.

VIEW FILE PROPERTIES

In Files & Setup Menu ...

1. Press  twice (**Data Files>View Folders**).
2. Scroll to desired folder, press  (**Open**).
3. Scroll to desired file, press  (**Menu**).
4. Scroll to **Property**, press .

PLAY MELODY RINGTONE OR MUSIC

In Files & Setup Menu ...

1. Press  twice (**Data Files>View Folders**).
2. Scroll to desired folder, press  (**Open**).
3. Scroll to desired file, press  (**Menu**).
4. Press  (**Play**).

EDIT MELODY RINGTONE

In Files & Setup Menu ...

1. Press  twice (**Data Files>View Folders**).
2. Scroll to desired folder, press  (**Open**).
3. Scroll to desired file, press  (**Menu**).
4. Scroll to **Edit Melody**, press .
 - See “Melody Composer” on page 70 to edit.
 - Polyphonic ringtones, music files, and voice recorded sounds (.amr files) cannot be edited.

Memory Status

Displays Data Folder memory usage and number of saved files.

In Files & Setup Menu ...

1. Press  to select **Data Files**.
2. Scroll to **Memory Status**, press .

SOUNDS

All Sounds

Enable or mute all ring and key tones.

In Files & Setup Menu ...

1. Scroll to **Sounds**, press .
2. Press  (**All Sounds**).
3. Scroll to **On** (all tones on) or **Off** (all tones muted), press .

Ring Volume

Adjust ring volume, including mute or escalating ringing.

In Files & Setup Menu ...

1. Scroll to **Sounds**, press .
2. Scroll to **Ring Volume**, press .
3. Scroll up and down to hear volume levels.
4. Press  when you hear desired volume level.
 - Adjusting volume above maximum sets escalating ringing. If you turn off ringing,  displays.

Ring Type

Set a unique ring to alert you of different types of calls (voice, fax, data...). Use preset tones or personally-composed melodies.

In Files & Setup Menu ...

1. Scroll to **Sounds**, press .
2. Scroll to **Ring Type**, press .
3. Scroll to type of call that will play ring tone, press .
4. Scroll to **Fixed Data** (preset tones) or **Data Files** (custom tones), press .
 - If selecting **Data Files**, scroll to folder, press .
5. Scroll up and down to hear ring selections.
6. Press  when you hear desired ring.

Melody Composer

Compose your own music to use as a ring tone.

Melodies are tagged with an `_.imy` extension.

In Files & Setup Menu ...

1. Scroll to **Sounds**, press .
2. Scroll to **Melody Composer**, press .
3. Scroll to desired option, press .

Create	Compose music (see next table). Press  twice to save. Enter composition name. Press  twice to save in the Data folder.
Edit	Scroll to Sound , press  . Scroll to composition, press  . Scroll to EditMelody , press  . Edit composition. Press  twice to save. Edit composition name. Press  twice to save.

Note: Press  at any time to play back melody. Scroll/move to edit. Press  to delete character(s) to left of cursor.

MELODY COMPOSITION TABLE:

Key	1st press	2nd press	3rd press	4th press	5th press
 <small>1_{abc}</small>	C	middle C	high C	low C	-
 <small>2_{abc}</small>	D	middle D	high D	low D	-
 <small>3_{def}</small>	E	middle E	high E	low E	-
 <small>4_{gh}</small>	F	middle F	high F	low F	-
 <small>5_{jkl}</small>	G	middle G	high G	low G	-
 <small>6_{mno}</small>	A	middle A	high A	low A	-
 <small>7_{pqr}</small>	B	middle B	high B	low B	-
 <small>8_{stv}</small>	-	-	-	-	-
 <small>9_{xyz}</small>	-	-	-	-	-
 <small>0₊</small>	Rest	-	-	-	-

MELODY COMPOSITION TABLE:					
Key	1st press	2nd press	3rd press	4th press	5th press
	1/8	1/4	1/2	1/1	1/16
	Sharp	-	-	-	-

Voice Recorder

Record your own message (like a dictaphone) or record a two-way conversation during a call.

Voice recordings are tagged with an `_.amr` extension.

In Files & Setup Menu ...

1. Scroll to **Sounds**, press .
2. Scroll to **Voice Recorder**, press .
3. Scroll to desired option.

Record	Press to begin recording; speak into microphone. Press to stop recording (or, it stops automatically if quiet for 10 seconds). Enter recording name. Press twice to save.
Edit	Press . Scroll to Sound , press . Scroll to recording to edit, press . Scroll to Edit, press : <ul style="list-style-type: none"> • Play: The recording plays. • Rename: Edit name, press twice to save. • Copy: Copy to paste in another folder. • Move: Move to another folder. • Delete: Press to delete the recording. • Property: Press to view the file properties.

Key-Press Volume

Adjust keypad volume.

In Files & Setup Menu ...

1. Scroll to **Sounds**, press .
2. Scroll to **Key-Press Volume**, press .
3. Scroll to hear volume levels.
4. Press when you hear desired volume level.

Key-Press Sounds

Select one of four key tone sounds.

In Files & Setup Menu ...

1. Scroll to **Sounds**, press .
2. Scroll to **Key-Press Sounds**, press .
3. Scroll to hear key tones.
4. Press when you hear desired key tone type.

Warning Alerts

Set a warning tone to alert you when the battery is low.

In Files & Setup Menu ...

1. Scroll to **Sounds**, press .
2. Scroll to **Warning Alerts**, press .
3. Scroll to **On** or **Off**, press .

DISPLAY SETTINGS

Clock/Calendar

Set display preference for clock/calendar. (Set clock first. See “Clock Set” on page 27.)

In Files & Setup Menu ...

1. Scroll to **Display Settings**, press .
2. Press  (**Clock/Calendar**).
3. Scroll to display preference, press .

Wallpaper

Set background wallpaper for Standby mode. Use preset graphics or your own photos or graphics.

In Files & Setup Menu ...

1. Scroll to **Display Settings**, press .
2. Scroll to **Wallpaper**, press .
3. Scroll to folder **Fixed Data** (5 preset wall paper backgrounds) or **Data Folder** (custom files), press 
 - If selecting **Data Folder**, scroll to folder with customized images, press .
 - To view image, press . After viewing, press .
4. Scroll to desired file, press .

Power-up

Add text greeting and animation during power on.

In Files & Setup Menu ...

1. Scroll to **Display Settings**, press .
2. Scroll to **Power-up**, press .
3. Scroll to desired option, press .

Animation	Scroll to On or Off , press  .
Greeting	Enter greeting (up to 120 characters), press  <ul style="list-style-type: none">• See “Appendix A: Text Entry” on page 91.

Brightness

Adjust main screen’s brightness level.

In Files & Setup Menu ...

1. Scroll to **Display Settings**, press .
2. Scroll to **Brightness**, press .
3. Scroll to desired brightness level; press .

Backlight Time

Set how long the main screen remains lighted after using the phone.

In Files & Setup Menu ...

1. Scroll to **Display Settings**, press .
2. Scroll to **Backlight Time**, press .
3. Scroll to desired time, press .

Keypad Lighting

Set keys to light or not when pressed.

In Files & Setup Menu ...

1. Scroll to **Display Settings**, press .
2. Scroll to **Keypad Lighting**, press .
3. Scroll to **On** or **Off**, press .

Sub LCD

Adjust contrast and set backlighting color for sub LCD (small display screen on outside of phone).

In Files & Setup Menu ...

1. Scroll to **Display Settings**, press .
2. Scroll to **Sub LCD**, press .
3. Scroll to desired option, press .

Contrast	Scroll to adjust contrast, press  .
Backlight Color	Scroll to activity that will activate a particular backlight color, press  . Scroll to color, press  .

LANGUAGE

This feature appears only if offered by your wireless service provider.

Display Language

Set the language your phone displays.

In Files & Setup Menu ...

1. Scroll to **Language**, press .
2. Press  (**Display Language**).
3. Scroll to desired language; press .

Tegic Language

Set the language preference for entering text from the keypad.

In Files & Setup Menu ...

1. Scroll to **Language**, press .
2. Scroll to **Tegic Language**, press .
 - See “Appendix A: Text Entry” on page 91.
3. Scroll to desired language; press .

QUIET MODE

On/Off

Enable or disable Quiet Mode.

In Files & Setup Menu ...

1. Scroll to **Quiet Mode**, press .
2. Scroll to **On** or **Off**, press .
 - Once set, see “*Quiet Mode*” on page 21.

Ring Volume

Personalize the ring volume that is used when Quiet Mode is enabled.

In Files & Setup Menu ...

1. Scroll to **Quiet Mode**, press .
2. Scroll to **Ring Volume**, press .
3. Scroll to hear volume levels.
4. Press  when you hear desired volume level.
 - Adjusting volume above maximum sets escalating ringing. If you turn off ringing,  displays.

Vibration

Select vibration setting that is used when Quiet Mode is enabled.

In Files & Setup Menu ...

1. Scroll to **Quiet Mode**, press .
2. Scroll to **Vibration**, press .
3. Scroll to **Continuous**, **Intermittent**, or **Off**; press .

VIBRATION ALERT

Set phone to vibrate to indicate an incoming call.

In Files & Setup Menu ...

1. Scroll to **Vibration Alert**, press .
2. Scroll to **Continuous**, **Intermittent**, or **Off**; press .

SHORT CUT KEY

Set a feature to quickly access by pressing  from standby. (Default setting is for the Camera.)

In Files & Setup Menu ...

1. Scroll to **Short Cut Key**, press .
2. Scroll to desired short cut key, press .
 - From standby, press  (below shortcut icon ) to open the item you selected as your shortcut.

PRESET MESSAGES

Edit preset messages that can be quickly inserted into your MMS or e-mail messages.

In Files & Setup Menu ...

1. Scroll to **Preset Messages**, press .
2. Scroll to desired message, press .
3. Edit message as desired, press  twice.
 - See “Appendix A: Text Entry” on page 91.
 - To insert a user message into MMS messages, see “Create” on page 41.
 - To insert a user message into e-mails, see “Create” on page 51.

KEY GUARD

Temporarily ‘locks’ keypad to prevent accidentally pressing keys.

Shortcut to turn on Key Guard,

1. From standby, press and hold .
2. Press twice  (**Enable>Ok**).

OR

In Files & Setup Menu ...

1. Scroll to **Key Guard**, press .
2. Press 
 - During incoming calls, you can press any key except  to answer the call.
 - You can still dial **911**  to make emergency calls. Calling Emergency shows on display.

TO TURN OFF/DISABLE KEY GUARD

From standby, press  twice.

ANSWER MODE

H’Free Auto Ansr

Set phone to automatically answer calls when using the Private Handsfree Headset. See “Private Handsfree Headset” on page 10.

In Files & Setup Menu ...

1. Scroll to **Answer Mode**, press .
2. Press  (**H’Free Auto Ansr**).
3. Scroll to **On** or **Off**, press .

Note: When Auto Answer is activated, the phone automatically answers an incoming call after 6 seconds.

Answer Key

Set phone so you can answer calls by pressing any key (except ) or so you can answer calls by pressing .

In Files & Setup Menu ...

1. Scroll to **Answer Mode**, press .
2. Scroll to **Answer Key**, press .
3. Scroll to **Any Key** or **Send Key**, press .

DTMF LENGTH

Set length of DTMF tones.

In Files & Setup Menu ...

1. Scroll to **DTMF Length**, press .
2. Scroll to **Long** or **Short**, press .

Note: To send DTMF tones during a call, see “*Touch Tones (DTMF)*” on page 22.

DEFAULT SETTINGS

Return phone settings to factory defaults.

In Files & Setup Menu ...

1. Scroll to **Default Settings**, press .
2. Press  to return phone to factory default settings.
 - Your lock code, language settings, Phonebook entries, and voice commands are retained.

BROWSER MENU



Your phone has a Wireless Application Protocol (WAP) configured wireless Internet browser, allowing you access to services such as news, weather reports, banking, sports, travel information and stock quotes.

WAP wireless Internet sites are designed to be easily accessible on your phone, so they are usually made up of text, hyperlinks, and may contain simple graphics to fit onto the phone screen display. WAP sites use Wireless Markup Language (WML), which is different than Hypertext Markup Language (HTML) used in computer Internet websites and cannot be accessed by wireless phones.

When available, your phone uses GPRS (General Packet Radio Service) technology, which is the fastest way currently to transmit data over mobile phone networks.

Note: In order to access the Browser, you first must set up your unique user name and e-mail address for your phone. Contact your wireless service provider for details.

Note: The types of service and content offered while connected to the Browser are supplied entirely by your wireless service provider.

To open the Browser Menu:

From standby, press  to launch the Browser.

OR

1. From standby, press  to open main menu display.
2. Scroll/move to highlight Browser Menu icon , press .

Setup to Connect to the Browser

Before starting, your wireless service provider may have already completed the connection settings. To view the connection settings on your Server List, see “*Server List*” on page 81.

START BROWSER

Launches Internet Connection

CONNECTING TO THE INTERNET

From standby, press  to launch the Browser.

OR

In Browser Menu ...

1. Press  (**Start Browser**).
 - The name of your wireless Internet service provider and an animated globe display while connecting.
2. Once the home page appears, you can access the services of your wireless Internet service provider.

NAVIGATING WEB CONTENT

Wireless web pages consist mostly of text because they are designed to be viewed on mobile phone screens. In general...

- Press top and bottom on the navigation key to move up/down through the page content.
- Press  (**Go or Select**) to select a highlighted item or to launch an underlined web page.
- Press left on navigation key to return to previous page.
- Press right on navigation key to return to the next page (available only if back button was used).
- Press  to disconnect the Browser at any time.
- While data is transmitting, a small globe flashes at the top of the display screen.

Note: When on-line, press  to review cache off-line.

Note: If you go to a site with many graphics, it may take longer for the images to load.

BROWSER MENU

Press  when Menu displays at the bottom left of the display. (Browser can be on-line or off-line.)

Home Page	Displays home URL (set by network operator)
Bookmark	Use, add, delete and rename bookmarks
Current URL	Displays current URL
Enter URL	Type a URL to go directly to a WAP configured site
Bookmark Pages	Saves website address of current screen to the bookmark list
Save Image	Saves image displayed on current screen
Reload	Reloads and updates current page
Display Images	Enable or disable images from displaying to save downloading time
Clear Cache	Deletes content in cache and displays Home URL content
Exit	Disconnects Browser

BOOKMARK

Open, rename or delete bookmarks while off-line.

In Browser Menu ...

1. Scroll to **Bookmark**, press .
2. Scroll to desired bookmark, press .
3. Press  (**Menu**).
4. Scroll to desired option, press .

Page INFO	View URL website address of bookmark
Edit Title	Edit title of bookmark
Display	Display bookmark list by group or by link
Delete This	Delete selected bookmark
Delete Any	Delete multiple bookmarks. Select them by pressing  twice (Menu>Select). A checkmark appears in the box next to the bookmark. Scroll to choose desired bookmarks to delete, select them as above. When finished, press  (Menu), scroll to Ok , press  to delete.
Delete All	Delete all bookmarks

ENTER URL

Enter a URL (website address).

In Browser Menu ...

1. Scroll to **Enter URL**, press .
2. To enter a new URL, press  (<Input URL>).
OR
To edit an existing URL, scroll to URL, press .
3. Enter or edit URL.
4. Press  twice to attempt to connect to entered URL.
 - The URL is also saved in the URL list.

BOOKMARK PAGES

Save the current page URL.

In Browser Menu ...

1. Scroll to **Bookmark Pages**, press .
2. Scroll to desired message, press .

PUSH MESSAGE

Access push messages that have been sent from the contents provider to your phone.

In Browser Menu ...

1. Scroll to **Push Message**, press .
2. Scroll to desired message, press .

BROWSER SETTING

Personalize your browser display settings (color, text size, etc...)

In Browser Menu ...

1. Scroll to **Browser Setting**, press .
2. Scroll to desired setting, press .

Web Page Colors	Scroll to Prefer Default (use web page color settings) or Custom (use your color settings), press  .
Font Size	Scroll to desired font size (on-screen text size), press  .
Customize Colors	Scroll to desired color setting, press  . Scroll/move to desired color, press  twice. Note: For more color choices, press  when colors display. Scroll to 256 Color , press  .
Display Images	Scroll to Enable (display images from website) or Disable (text only), press  .
Bookmark	Scroll to By Link or By Group , press  to sort bookmark list.

Push Reception	Scroll to Enable (receive push messages) or Disable (do not receive push messages), press  .
-----------------------	---

SERVER LIST

Set your phone to use a particular wireless Internet service provider server when traveling.

Change server settings or add up to 4 servers.

In Browser Menu ...

 **Warning:** These settings may be preprogrammed by your network operator. Modifying previously entered settings can cause failure of the Browser.

1. Scroll to **Server List**, press .
2. Scroll to desired server to add or update, press  (**Menu**).
3. Scroll to **Edit**, press .
4. Scroll to desired setting, press  (**Edit**) or (**Select**).

Profile Name	Enter name, press  twice.
Home URL	Enter home URL, press  .
Linger Time	Enter linger time (phone automatically disconnects from WAP server after set time of no activity), press  twice. Note: Not required when using GPRS.
Gateway IP	Enter IP address, press  .
Security	Scroll to Secure or Non Secure , press  .
Bearer Type	Scroll to Circuit Switch or GPRS , press  . Note: When using GPRS, it is possible to remain passively connected to a server for an indefinite amount of time.

Note: The Server Auto setting sets your phone to automatically use the preset server sent over the air by your wireless Internet service provider.

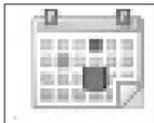
STATUS LOG

View last error which occurred with your phone.

In Browser Menu ...

1. Scroll to **Status Log**, press .

CALENDAR MENU



Warning: Ensure that any Calendar settings will not automatically power on the phone when in a location that it may interfere with medical equipment, aircraft, blasting areas, etc.... See “*Safety First*” section starting on page 1.

Before opening the Calendar Menu for the first time, set the clock. See “*Set Time/Alarms*” on page 27.

To open the Calendar Menu:

1. From standby, press to open main menu display.
2. Scroll/move to highlight Calendar Menu icon , press .

Creating a Reminder

In Calendar Menu ...

1. Scroll/move to select desired date.
2. Press twice (**Menu>Create**).
3. Scroll to clock icon , press .
4. Enter start time (hours and minutes), press twice.
5. Enter end time (hours and minutes), press twice.
6. Scroll to reminder repeat icon, press .
7. Scroll to desired repeat times, press .
 - If you select **Daily**, **Weekly**, or **Yearly**, enter how often the reminder should occur, press twice. Then, scroll to Holiday Alarm **Off** or **On**, press .
8. If desired, scroll to memo icon , press .
9. Enter desired memo text, press twice.
10. Scroll to ring icon , press .
11. Scroll to desired ring type, press .
 - See “*Ring Type*” on page 70.
12. Press (**Save**) to save reminder.
13. Press to verify the end date.
 - To indicate that a reminder is set, the beginning date is marked with a box. Additional reminder dates are boxed.

Viewing Reminders

In Calendar Menu ...

1. Scroll/move to desired date, press .
2. Press  again to view the details.

Deleting Reminders

In Calendar Menu ...

1. Scroll/move to select desired date, press .
2. Press  to view.
3. Press  (**Menu**), scroll to Delete, press  twice.

Setting a Holiday Reminder

In Calendar Menu ...

1. Scroll/move to select desired holiday date, press .
2. Scroll to **Options**, press .
3. Scroll to **Holiday Set**, press .
4. Scroll to **Day** or **Day of the week**, press  three times to add the date to the Holiday List reminders.
 - If you select **Day of the week**, scroll to desired day.
 - Repeat process for each day of holiday as required.
 - To indicate that a holiday reminder is set, the date displays in red on the calendar.

Deleting Holiday Reminders

In Calendar Menu ...

1. Scroll/move to select desired holiday date, press .
2. Scroll to **Options**, press .
3. Scroll to **Holiday Set**, press , scroll to Holiday List, press , scroll to date, press  twice.

OR

To delete all holiday reminders, scroll to **All Clear**, press  twice.

Jump to Future Date

In Calendar Menu ...

1. Scroll/move to a date, press .
2. Scroll to **Jump**, press .
3. Press and hold  to erase current date.
4. Enter date to which you want to jump, press  twice.

OPTIONS & TIMERS MENU



To open the Options & Timers Menu:

1. From standby, press  to open main menu display.
2. Scroll/move to highlight Options & Timers Menu icon , press .

TIMERS & SERVICE

Voice Calls

Review voice call timers and phone number display status.

SIM card dependent.

In Options & Timers Menu ...

1. Press  twice (**Timers & Service > Voice Calls**).
2. Scroll to desired option to review, press .

Last Call Timer	Length of last voice call.
All Calls Timer	(Incoming or Outgoing) Total time of all incoming or outgoing voice calls.
Call Waiting	Press  to see if Call Waiting is enabled or disabled. Press  to exit. Or, to change setting, press  , scroll to other option and press  . See <i>"Incoming Call while on a Call"</i> on page 23.
Caller's ID	Choose whether caller's ID is displayed or hidden.
Notes: Times display as HH:MM:SS (hours:minutes:seconds). The actual time invoiced for calls by your wireless service provider will vary from the time represented on your call timer. The invoiced time is affected by the number of network features selected, when billing begins and ends, and rounding for billing.	

Data Calls

Review data call timers and amount of data transferred. Also, set whether voice or data calls have priority.

SIM dependent.

In Options & Timers Menu ...

1. Press  (**Timers & Service**).
2. Scroll to **Data Calls**, press .
3. Scroll to desired option, press .

Last Connection	Length of last connection and amount of data transferred during call.
All Connections	Total time of all connections and total amount of data transferred.

Call Priority	Set whether an incoming voice call can interrupt a data call. To set, scroll to Enable (voice has priority over data) or Disable (data calls are not interrupted), press  .
Note: Times display as HH:MM:SS (hours:minutes:seconds). The actual time invoiced for calls by your wireless service provider will vary from the time represented on your call timer. The invoiced time is affected by the number of network features selected, when billing begins and ends, and rounding for billing.	

Send Caller ID

Set to transmit your number to another phone (caller ID).

Network dependent.

In Options & Timers Menu ...

1. Press  (**Timers & Service**).
2. Scroll to **Send Caller ID**, press .
3. Scroll to **Network set, On, or Off**, press .

CALL FORWARDING

Forward incoming calls (voice, data, fax) to another number.

Network dependent.

In Options & Timers Menu ...

1. Scroll to **Call Forwarding**, press .
2. Scroll to desired option, press .

Fwd Voice Calls or Fwd Fax Calls or Fwd Data Calls	Press  , then scroll to desired option, press  . Enter phone number where call should be forwarded; or, press  (once to select a stored phone number or twice to select a group). After number is entered, press  twice. Call forwarding icon () displays.
Cancel All	Press  to cancel call forwarding.
Status	View current settings.
Note: When updating or viewing settings, your phone must be registered on a network.	

SECURITY

Security functions can help protect your phone from unauthorized use. You should memorize your security codes. If you do need to write down any of your codes, do not write them where they can be viewed or recognized by someone else. If you ever forget your code(s), contact your wireless service provider.

Lock Phone

Prohibit phone use except to answer calls or to dial 911.

Preset code is **1234**.

If you change the lock code, be sure to remember your new code.

Shortcut to turn on Lock Phone,

1. From standby, press and hold .
2. Scroll to **Lock Phone**, press  (**Enable**).
3. Enter the 4-digit lock code, press  (**Ok**).

OR

In Options & Timers Menu  ...

1. Scroll to **Security**, press .
2. Press  (**Lock Phone**).
3. Scroll to desired option, press .

On/Off	Press  (On/Off). Scroll to On (phone lock on) or Off (phone lock off), press  . Enter 4-digit lock code, press  . (Enter 1234 if you have never changed the lock code.) If you set the phone lock to On , the phone locks and the lock icon () displays. Enter the 4-digit lock code and press  to use phone.
Change Code	Enter 4-digit lock code, press  . (Enter 1234 if you have never changed the lock code.) Enter new 4-digit lock code, press  . Enter new code again, press  .

PIN or PIN2

The PIN (Personal Identification Number) protects your SIM against unauthorized use. When enabled, you must enter the PIN every time you turn on the phone.

PIN2 controls security for Fixed Dial Store, Call Charge Metering and Barred Dial.

In Options & Timers Menu ...

1. Scroll to **Security**, press .
2. Scroll to **PIN** or **PIN2**, press .
3. Scroll to desired option, press .

Enable/Disable	Scroll to Enable (PIN/PIN2 protection on) or Disable (no PIN/PIN2 protection), press  . Enter 4- to 8-digit PIN/PIN2, press  . If you set Enable , enter PIN/PIN2 and press  every time you turn on phone.
Change Code	Enter PIN/PIN2, press  . Enter new 4- to 8-digit PIN/PIN2, press  . Enter new PIN/PIN2 again, press  .
Note: If PIN/PIN2 is entered incorrectly 3 times, the phone locks. Contact your wireless service provider for a PUK/PUK2 code. If the PUK/PUK2 code is entered incorrectly 10 times, the phone will not operate. All information stored in the SIM card is lost and the SIM card must be replaced.	

Dial Only PhBook

Restricts dialing to numbers stored in the phonebook.

Requires PIN2 code.

In Options & Timers Menu ...

1. Scroll to **Security**, press .
2. Scroll to **Dial Only PhBook**, press .
3. Scroll to **Enable** or **Disable**, press .
4. Enter PIN2, press .

Note: When Dial Only PhBook is enabled, any manually dialed phone number must match a stored phone number. Phone numbers can be added, edited or deleted as normal, but you will be prompted for PIN2.

No SIM PhBk Dial

Prohibit manual dialing of pre-programmed phone numbers in the SIM Phonebook.

Requires PIN2 code.

In Options & Timers Menu ...

1. Scroll to **Security**, press .
2. Scroll to **No SIM PhBk Dial**, press .
3. Scroll to **Enable** or **Disable**, press .
4. Enter PIN2, press .

NETWORK

Network Search

Manually select an available network when using your phone outside of your home area (roaming).

In Options & Timers Menu ...

1. Scroll to **Network**, press .
2. Press  (**Network Search**).
3. Scroll to desired network to use, press .

Note: An “X” displays if you cannot register with the selected network.

Note: Roaming charges may apply.

Search Mode

Set phone to automatically search for networks when roaming or set phone so you can manually select a network when roaming.

In Options & Timers Menu ...

1. Scroll to **Network**, press .
2. Scroll to **Search Mode**, press .
3. Scroll to **Automatic** or **Manual**, press .

Note: If you select **Manual**, you will have to manually select a network. See “*Network Search*” on page 89.

Network List

View available networks.

In Options & Timers Menu ...

1. Scroll to **Network**, press .
2. Scroll to **Network List**, press .
3. Scroll to view available networks.

Search Mode must be set to **Automatic**. See “*Search Mode*” on page 89.

SIM card dependent.

TEXT TELEPHONY

Allows a hearing-impaired person to use the phone by connecting a TTY device.

To set TTY mode, in Options & Timers Menu ...

1. Scroll to **Text Telephony**, press .
2. Scroll to **On** or **Off**, press  twice to turn on, once to turn off.
 - When on, any accessory that is connected through the 2.5 mm Headset/TTY connector is expected and assumed to be a TTY device.
 - TTY mode must be enabled to send and receive TTY calls.
 - When making a TTY call, plug in the TTY device before making a call. To answer a TTY call, answer the phone and plug in the TTY device.
 - If TTY is enabled, the TTY icon  is indicated at the top of the display.

APPENDIX A: TEXT ENTRY

Use the phone's keypad to enter text, characters and numbers. There are multiple ways to enter text/characters/numbers:

- **Standard Text Entry** (ABC entry with English, Greek and international letters)
- **Tegic Language Entry** (also known as T9[®] Text/Quick Entry for entering commonly-used words)
- **Character Entry** (includes upper and lower case letters, numbers, and standard characters such as a period, @, slash, colon, semicolon, brackets, etc....)
- **Number Entry**

Standard Text Entry	Tegic Language Entry (or, T9 [®] Text/Quick Entry):
To enter a letter, press a number key one to seven times until corresponding letter on the key displays.	To enter a letter, press the corresponding number key once. As you enter a word, the phone displays the most likely word match for your entry. If the correct word does not display, press  repeatedly to scroll through an alternate word list.
Enter English alphabet (ABC), Greek characters (ΑΒΓ), or international characters (ÄÅ).	Enter words included in the phone's dictionary. (Note: You can add words to the dictionary).
Recommended for entering proper names or words not commonly found in a dictionary.	Recommended for commonly-used words.

Entering/Editing Text, Characters, and Numbers

When ready to enter information (flashing cursor):

1. Press , scroll to desired text entry method, press :

Char. List	Scroll/move to select desired letter, number or character. Press  .
Input Mode	Scroll/move to select desired text entry method: T9, Abc, 0-9, ΑΒΓ, ÄÅ. Press  .

OR

Press  repeatedly to scroll through the input methods (not character list).

- Currently **Input Mode** displays at lower left of the display.
2. Enter text, characters or numbers.
 - See the following table for details about what each key press will enter.
 - Flashing cursor indicates where next letter/character/number will be entered.

- Scroll up or down to move through lines of text. Move left or right to move along a line of text.
- To enter consecutive letters from the same key, pause for a second and the cursor automatically moves to the next space. Or, use the navigation key to move right or left the desired number of spaces.
- Press  once to enter a single capital letter. Press  twice for CAPS LOCK. Press  three times to return to lowercase text entry.
- As a shortcut, press and hold any numeric key to enter the character menu.
- Switch between text entry modes as needed.
- Press  briefly to delete previous letter/character/number. Press and hold  to erase the entire entry. (Note: Usually, pressing  cancels the current screen. However, in text mode, to cancel the current screen, press , scroll to Cancel, and press  again.)

3. When your entry is complete, press , scroll to Ok, press  again.

Key	Text Mode:				
	T9/T9†®	Normal (ABC)	Greek (ΑΒΓ)	Extended (ΑĂĂ)	Numeric (0 - 9)
	Alternatives	+ _	+ _	+ _	0+P _
	Punctuation	.@:; *#+" ,! ; ? ; _ () [] {} ' & % \ ^ ~ < > = € £ \$ ¥ ¢ §	.@:; *#+" ,! ; ? ; _ () [] {} ' & % \ ^ ~ < > = € £ \$ ¥ ¢ §	.@:; *#+" ,! ; ? ; _ () [] {} ' & % \ ^ ~ < > = € £ \$ ¥ ¢ §	1
	ABCabc	ABCabc	ΑΒΓ	ΑĂĂÆBCÇαăăæăăbc	2
	DEFdef	DEFdef	ΔΕΖ	DEĒĒFdeééf	3
	GHIghi	GHIghi	ΗΘΙ	GHIghii	4
	JKLjkl	JKLjkl	ΚΛΜ	JKLjkl	5
	MNOmno	MNOmno	ΝΞΟ	MNŃŃOŃŃmnñioöôô	6
	PQRSpqrs	PQRSpqrs	ΠΡΣ	PQRSpqrsß	7
	TUVtuv	TUVtuv	ΤΥΦ	TUŮVtuüv	8
	WXYZwxyz	WXYZwxyz	ΧΨΩ	WXYZwxyz	9
	Shift/Lock*	Shift/Lock*		Shift/Lock*	*
	Space	Space	Space	Space	#

APPENDIX B: SPECIFICATIONS & TROUBLESHOOTING

SPECIFICATIONS

PHYSICAL CHARACTERISTICS	
Dimensions	3.84" x 1.93" x 0.91" (97.5 x 49 x 23 mm)
Weight (including battery)	3.63 oz. (103g)
Maximum RF Output	1 W
Antenna	Fixed

TROUBLESHOOTING

Should any problem continue, please contact your wireless service provider.

Problem	Cause	Possible Solution
Phone will not turn on		Check that the battery is fully charged and correctly connected to the phone
Extremely short battery life for a new battery	The network you are using and the condition of the battery can affect battery life	
Short battery life for an old battery	The battery has worn out	Replace with a new fully charged battery
The charging indicator does not light, the battery level indicator does not appear and the phone cannot be switched on when charging	The battery is not attached to the phone or when the battery has been deeply discharged the phone will take a short time until the indicator lights	Leave the phone charging the battery for a few minutes before the indicator is lit and attempting to switch it on
Battery fails to charge	The battery is not attached to the phone	Ensure the battery is fitted to the phone prior to commencing charging.
	Battery has been connected to the phone after the Rapid Charger has been turned on	

Problem	Cause	Possible Solution
Calls cannot be made	The phone is locked	Unlock the phone
	Outgoing calls are barred	Disable the outgoing call barring, or barred dial
	The phone is not registered to a network	Move to a coverage area and operate your phone after it has registered with a network.
Calls cannot be made from Fixed Dial Store		Check your SIM card supports Fixed Dial Check if the Fixed Dial is switched on Check the phone number is stored in the Fixed Dial
Calls cannot be received	The phone is not switched on	Switch the phone on
	Incoming calls are barred	Disable the incoming call barring
	The phone is not registered to a network	Move to a coverage area and operate your phone after it has registered with a network
Emergency calls cannot be made	You are not in a GSM coverage area	Check that the antenna symbol  is displayed - move to a coverage area and operate your phone when the antenna symbol is displayed
Phone numbers cannot be recalled from Phonebook	The phone is locked	Unlock the phone
	Phone number has been restricted	Switch off restriction

IMPORTANT ERROR MESSAGES

These are some of the most important error messages which may be displayed:

Error Message	Meaning
Area Not Allowed	Roaming in the selected area is not allowed
Auto Redial List Full	Redial list of unsuccessfully dialed numbers is full - switch the phone off and then on again
Function Unavailable	The selected feature is either not supported by the SIM card or is not available with the current subscription - contact your wireless service provider

Error Message	Meaning
Incorrect Lock Code	Disabling or enabling the lock code has failed due to incorrect entry of the lock code - re-enter lock code
Incorrect PIN / PIN2 / PUK / PUK2	The entered code is incorrect - re-enter code correctly
Message Rejected Store Full	A message has been received but the message store is full - to receive messages, delete some of the currently stored messages or set messages to Auto Delete
Network Not Allowed	Roaming with the selected network is not allowed
Phone Number Too Long (Max:20)	The edited or newly created Phonebook number is too long for the SIM card
PIN2 Invalidated	The PIN2 is blocked permanently because the wrong PUK2 has been entered ten times, services controlled by PIN2 cannot be used - contact your wireless service provider
Security Failure	The network has detected an authentication failure because your SIM card is not registered with that network - contact your wireless service provider
SIM Blocked / Contact Service provider	The SIM is blocked because one of the PIN/PIN2 unblocking keys (PUK/PUK2) has been entered incorrectly ten times - contact your wireless service provider
SIM Error	The phone has detected a problem with the SIM card- switch the phone off and then back on; if the message is still displayed contact your wireless service provider
SIM Invalid	The SIM card has failed one or more of the SIM card personalization checks - contact your wireless service provider
Verification Failure	On changing the phone lock code, verification of the new code is incorrect - retry changing the lock code with correct verification
Warning Store Full Continue?	The message area is full. Your messages cannot be stored until some of the currently stored messages are deleted

APPENDIX C: CONSUMER UPDATE

Consumer Update on Mobile Phones

(Published by U.S. Food and Drug Administration, Center for Devices and Radiological Health, October 20, 1999.)

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 kind 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 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 effect 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 from 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 test. 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 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 handheld 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 PCD 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/peh-emf](http://www.who.int/peh-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/>

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- 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, Aand Mild, KH. “Use of cellular telephones and the risk for brain tumors: a case-control study”. Int. J. Oncol., 15: 113-116, 1999.

APPENDIX D: GLOSSARY

APN	Access Point Name. Directs the user to the gateway or the required service.
CHAP	Challenge Handshake Authentication Protocol. A security feature for the GPRS network.
Copy	Copies selected text from short text message without removing it from the original message.
Cut	Permanently removes selected text from short text message.
DTMF Tones	Dual Tone Multi-Frequency tones (touch tones) allow you to communicate with computerized phone systems, voice mailboxes etc.
GPRS	General Packet Radio Service. A GSM data transmission technique that transmits and receives data in packets rather than setting up a continuous channel. It makes very efficient use of available radio spectrum and users pay only for the volume of data sent and received.
GSM	Global System for Mobile Communications. A digital cellular or PCS network used throughout the world.
MMS	Multimedia Messaging Service. Attach images and music to text messages.
Network Operator	The organization responsible for operating a GSM network.
Password	Used for the control of the Call Bar. Supplied by your wireless service provider.
PIN	Personal Identification Number used for SIM security. Supplied by your wireless service provider. If the PIN is entered incorrectly 3 times, the PIN will be blocked.
PIN2	Personal Identification Number used for the control of Fixed Dial Store and Call Charge metering. Supplied by your wireless service provider. If the PIN2 is entered incorrectly 3 times, the PIN2 will be blocked.
PUK/PUK2	PIN/PIN2 Unblocking Key. Used to unblock the PIN/PIN2. Supplied by your wireless service provider. If the PUK/PUK2 is entered incorrectly 10 times, the PUK/PUK2 will be blocked.
Registration	The act of locking on to a GSM network. This is usually performed automatically by your phone.
Roaming	The ability to use your phone on networks other than your home network.
SMS	Short Message Service. Transmission of short text messages to and from mobile phones via the Network Operator's message center.

T9®	Allows text entry with one key press per letter using a highly compressed database instead of pressing one key multiple times until the desired letter appears. As you enter a word, the phone displays the most likely word match for your entry.
Wireless Service Provider	A company that provides services and subscriptions to mobile phone users.
SIM	Subscriber Identity Module. A small smart-card which stores unique subscriber and user-entered information such as Phonebook and Short Messages. Supplied by your wireless service provider.
WAP	<p>Wireless Application Protocol. A communication standard which enables you to download resources from the Internet to your phone. WAP sites consist of text, hyperlinks and some pages contain low-resolution graphics.</p> <p>Bookmark: A saved link to a web page.</p> <p>Browser: An application program that provides a way to look at and interact with the Internet.</p> <p>URL: Uniform Resource Locator. An address of a file (resource) accessible on the Internet.</p>

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Si desea hacer su pedido de la versión en español
(No. catálogo 3TR001403AAA) de este manual,
llame sin costo al **1 (800) 833-9626**.

Reference Information

For future reference, please complete the information on this page. Also, you may want to tape or staple your purchase receipt here.

Model Number: _____

IMEI Number (under battery on back of phone):

Purchase Date: _____

Dealer's Name: _____

Dealer's Address: _____

Dealer's Phone Number: _____

Emergency Number: _____

Lock Code: _____

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3TR001287AAA