

User Manual

LS670

Ver. 1.1
2010. 05. 11

Part 15.21 statement

" Change or Modifications that are not expressly approved by the manufacturer could void the user's authority to operate the equipment. "

Part 15.105 statement

This equipment has been tested and found to comply with the limits for a class B digital device, pursuant to Part 15 of the FCC Rules.

These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

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

Part 15 Class B Compliance

This device and its accessories comply with part15 of FCC rules.

Operation is subject to the following two conditions:

- (1) This device & its accessories may not cause harmful interference.
- (2) This device & its accessories must accept any interference received,
including interference that may cause undesired operation.

Body-worn Operation

This device has been tested for typical body-worn operations

with the distance of 0.79inches (2.0cm) from the user's body.

To comply with FCC RF exposure requirements, a minimum separation distance of 0.79inches(2.0cm) must be maintained from the user's body.

Additionally, Belt clips, holsters & other body-worn accessories may not contain metallic components.

View of Phone

1. **END/PWR Switch:** Lets you power the phone on or off.
2. **Antenna:** Retractable antenna provides optimum reception for 800 MHz & 1900 MHz frequencies.
3. **Power On Indicator:** Illuminates red when the phone powers on or when you receive incoming calls. Flashes red when you have messages or scheduled alarms.
4. **Headset Jack:** Provides connection for an optional headset.
5. **Volume Control Keys:** Adjust the Ring Volume in the Main Menu or the Voice Volume during a call. The keys also scroll through months in the Calendar or pages in the MiniBrowser.
6. **Mouse Key:** Allows quick and easy scrolling through the menus.
7. **OK:** Lets you place a call, receive a call, end a call or select menu options.
8. **CLR:** Lets you clear an entry or back-up in the menu.
9. **Folder :** Lets you answer or end calls.

Installing and Removing the Battery

To install the battery, insert the bottom of the battery into the opening on the back of the phone. Then, push the battery down until the latch clicks.

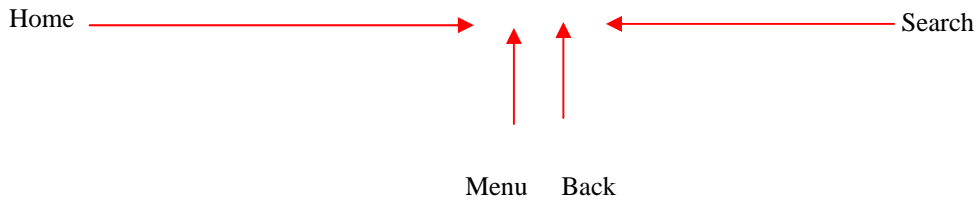
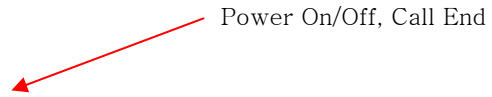
To remove the battery, press down on the latch and remove the battery from the phone.

Turning Your Phone On and Off

To turn your phone on, move the On/Off Switch (near the antenna) to the ON position. Your phone performs a short self-test before letting you know it is operational.

If your phone does not turn on, make sure the battery is installed correctly and is adequately charged or has external power (via the AC Adapter, Cigarette Lighter Adapter or Hands-Free Car Kit).

To turn your phone off, move the On/Off Switch to the OFF position.



Main Menu




When your phone acquires Service, the Greeting (a banner of text), the current time and date and the Main Menu are displayed. If you are in authorized analog cellular provider's service area, you are ready to send and receive calls.


Power Save Mode


When the phone is in an area without service for 15 minutes, it stops searching for service and enters into the power Save Mode. When your phone activates this feature, Power Save is displayed on your screen. The phone automatically checks for service periodically or you can check manually by pressing any key.

Entering Characters Using the Keypad(T9)

To enter a letter, punctuation or number when creating Phone Book or Scheduler entries, press the corresponding key until the desired character appears. By default, the first letter of a word is capitalized and following letters are lowercase. Characters in the following order:

 1 . ? , ' & . @ () / ~	 P Q R S 7 p q r s
 2 A B C 2 a b c 2	 T U V 8 t u v 8
 3 D E F 3 d e f 3	 W X Y Z 9 w x y z 9
 4 G H I 4 g h i 4	 Next 0
 5 J K L 5 j k l 5	 Shift
 6 M N O 6 m n o 6	 Space

After a character is entered, the cursor automatically advances to the next space after two seconds. You can also advance the cursor by pressing  or entering a character not on the same key.

If you make a mistake, press  to move the cursor left or [CLR] to erase a character. To clear the entire entry, press and hold [CLR] for two seconds.

Display Icons

Display icons are the symbols your phone uses to communicate important information. They are as follows:

ICON	DESCRIPTION
	3G send
	3G receive
	3G send receive
	Alarm
	Battery
	Antenna
	In use
	No service
	Location
	Location out
	Voice
	Voice Privacy
	Vibrate
	<u>Roaming</u>
	TTY
	SSI
	Ringer
	Ringer off
	Text + voice

Antenna

The antenna on your LS670 provides maximum reception by extending or retracting it.

!!! WARNING – CHOKING HAZARD – ANTENNA MAY BECOME DISLODGED

Attempting to remove or repeated twisting of the antenna will loosen the materials securing it into antenna. Once the antenna is loosened or removed, only an authorized service provider Representative can restore the antenna's original integrity. Do not attempt to remove or twist the antenna.

Signal Strength

The quality of each call you make or receive depends on the signal strength on your area. The number of bars in the Signal Strength icon informs you of the current strength. The more bars, the stronger the signal.

Battery Capacity

Your LS670 is equipped with a Lithium Polymer battery. It allows you to recharge your battery before it is fully drained. The battery provides approximately 180 minutes of continuous digital talk time or approximately 110 hours of continuous digital standby time.

Note: Long backlight settings affect the battery's talk and standby times.

When the battery reaches 5% of its capacity, the battery icon blinks. When there is about one minute of talk time left, the phone sounds an audible alert every 30 seconds and then powers down.

If the battery's charge is completely run down, it takes 2 to 3 hours to fully recharge. It is not necessary to let the battery completely run down before recharging.

To charge your batteries, use only approved charging accessories.

Using the AC Adapter

To charge the battery, plug the AC Adapter into a standard wall outlet and connect it to the phone via the I/O Connector on the bottom of the phone. Alternatively, you can place the phone in the charging cradle provided with your phone and connect the AC Adapter to the back of the cradle.

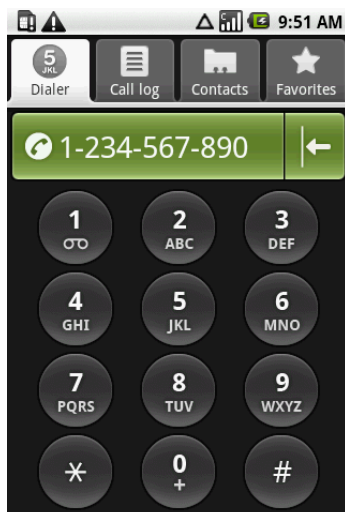
The battery Charge Status icon flashes during charging. When the battery is fully charged, the battery icon stops flashing.

Using Your Phone

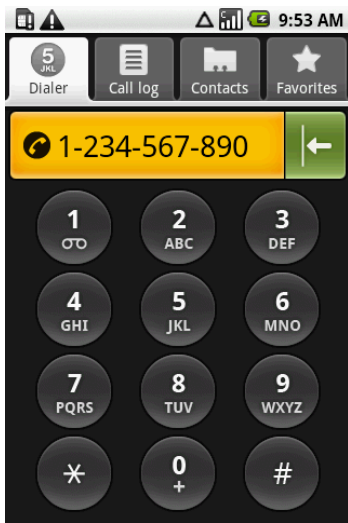
Placing a Call

When the phone is turned on, check the Signal Strength icon to see if you are in a Service Area or authorized PCS CDMA provider's service area.

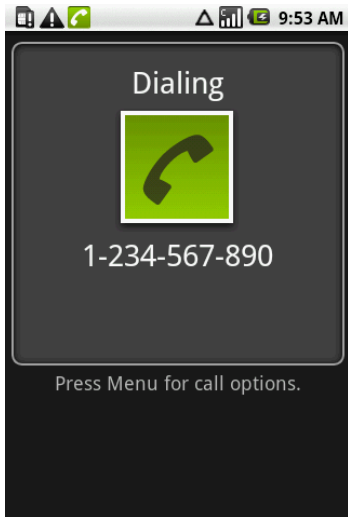
1. At Home Screen or Menu Screen.
2. Touch Dialer
3. At Dialer Screen, Enter digits.



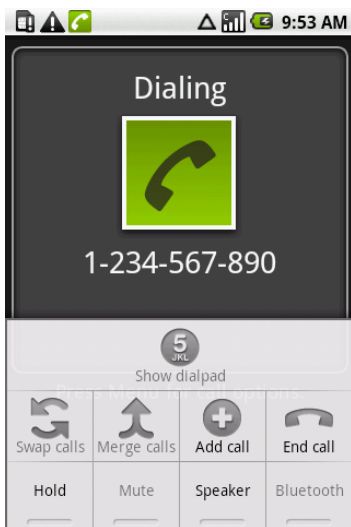
4. Touch Dial Number Screen.



5. Dialing



6. If you want call end, press MENU key and Touch Call End or press Power On/Off key on top of phone



Roaming With Your Phone

Your Phone is you can use it to make and receive calls in many places.

Setting Your Phone's Mode

Your Phone allows you to control your ability to roam. (See "Set Mode")

Calling Experience

When you use your phone on other PCS CDMA networks, your calling experience and call quality will be quite similar to what you experience when making calls within the Network. Although certain calling features may not be available, your phone calls are still private and secure.

Correcting Dialing Mistakes

To delete one digit at a time, press . To delete all digits, press and hold .

Redialing Last Outgoing Number

Press and hold [SEND] for 2 seconds.

Dialing Options ([phone book](#) – Not Functioning)

When you enter numbers in the Main Menu, dialing options are displayed. To display a Phone Book entry, enter its entry number. To use the 4-Digit Dial option, enter the last four digits of a phone number in your Phone Book.

To select an option, highlight it and press [SEND]. ([Menu display](#) only, [phone book](#) – Not Functioning)

- Call – Dials the phone number.
- Roam Confirm – Reminds you that you are making a call on an. (See "Disabling Roam Confirm")
- Roam Call – Dials the phone number using the current PCS CDMA or analog cellular network.

- Save – Saves the phone number in your Phone Book. (See “Saving a Phone Number” on the following page.)
- Find – Displays phone numbers in your Phone Book that contain the entered numbers. (See “Finding a Phone Number”)
- Hard Pause – Inserts a Hard Pause. (See “Dialing and Saving Phone Numbers With Pauses”)
- 2- Second pause – Inserts a two-second pause. (See “ Dialing and Saving Phone Numbers With Pauses”)
- Exit – Returns to the Main Menu.
- A Phone Book Entry – Displays the Phone Book entry. To dial the entry’s speed-dealing number, press and hold [SEND]. To dial an alternate number, highlight it and press and hold [SEND].
 - ☞ Tip! To speed dial a Phone Book entry from the Main Menu, press and hold the entry’s number. If the entry number is two digits, enter the first digit, then press and hold the second digit. (This feature will not work when the Roam Confirm option is enabled.)
- 4-Digit Dial – Dials the phone number in your Phone Book that ends with the four digits you enter. (See “4-digit Dialing”)

In Call Options

During a call, your phone displays menu options in addition to the Main Menu.

To select an option, Highlight it and press [OK]. (functions ‘Send’ and ‘End’ only)

- End Call - Ends the call
- Send Tones - Sends the next set of numbers after a Hard Pause. (See “Dialing and Saving Phone Numbers With Pauses “ on the previous page.)
- Mute or Unmute – Select Mute to mute your phone’s microphone. Select Unmute to reactivate the microphone.

- Dial 3-Way Call – Lets you dial another phone number.
- Flash – Answers an incoming Call Waiting call or connects the third party for Three-Way Calling.

Incoming Call Notification

Depending on your settings, your phone notifies you of incoming calls in the following ways:

- The phone rings or vibrates
- The LED flashes green
- The backlight illuminates
- The screen displays an incoming call message
- The phone number of the caller is displayed if the phone number is available
- The caller's name is displayed if the phone number is in your Phone Book

The following options are also displayed. To select an option, highlight it and press [SEND].

- Answer – answers the call.
- Silent Ringer – Mutes the ringer.

Note: You can also mute the ringer by pressing the up or down Volume Control key or [CLR].

Answering Calls

To answer incoming calls, open the Flip (in Active Flip Mode) or press [SEND].

Note: If you open the Flip (in Active Flip Mode) and then press [SEND], you will hang up on the caller.

To answer incoming roam calls, highlight **Answer** and press [SEND].

Displaying Your Phone Number(phone book – not functioning)

To display your phone number:

1. From the Main Menu, select **SETTING & TOOLS**.
2. And press 4 – 2 – 1. (System – Device Info – My Phone Number)

Getting the Most From Service

Retrieving Page/Text Messages

To retrieve page/text messages:

1. From the **Messaging**
2. Highlight **Inbox** and press [OK].

Highlight the message you want to display and press [OK].

To select an option, highlight it and press [OK].

Text Message options:

- Save Quick-Text.
- Add To Contacts
- Lock

- Message Info.

Erasing All Page/Text Messages

1. From the **Messages** Menu, Press the **Options** Menu
2. Highlight **Erase All** and press [OK].
3. Highlight **Yes** and press [OK].

Page/Text Message Storage

Your LS670 can store up to 50 page/text messages. When the message memory is 100% full, a warning message prompts you to erase messages to obtain more memory space.

Sounds

Adjusting the Volume

1. From the Main Menu, highlight Sounds and press [OK].
2. Highlight Volume and press [OK].
3. Highlight Ringer or Key Beep and press [OK].

Tip! You can use the Volume Control keys to adjust the Ring Volume in the Main Menu or the Voice Volume during a call.

4. Highlight **High**, **Medium**, **Low**, **Off** or **Vibrate** (for Ringer only) and press [OK].

Note: When the phone is in Vibrate Mode and attached to an accessory (Desktop Charger, Hands-Free Car Kit, etc.), it uses the Standard Ring Type to alert you of incoming calls, alarms or messages.

Selecting Ring Types for Voice Calls

To Select a Ring Type for Voice Calls:

1. From the Main Menu, highlight **Sounds** and press [OK].
2. Highlight **Ring Type** and press [OK].
3. Highlight **Voice Calls** and press [OK].
4. Highlight **With Caller ID**, **No Caller ID** or **Roaming** and press [OK].

Note: If you select Roaming, the Ring Type is used for all incoming roaming calls.

5. Highlight a Ring Type and press [OK]. You will hear a preview of the Ring Type when you highlight it.

Tip! You can also assign different Ring Types to individual Phone Book entries. (See “Selecting an ID Finger” on page 46.)

Selecting Ring Types for Messages

To select a Ring Type for Messages:

1. From the Main Menu, highlight **Sounds** and press [OK].
2. Highlight **Ring Type** and press [OK].
3. Highlight **Messages** and press [OK].
4. Highlight **Voicemail**, **Page/Text** or **MiniBrowser** and press [OK].
5. Highlight a Ring Type and press [OK]. You will hear a preview of the Ring Type when you highlight it.

Tone Length

Longer tone lengths may be better for tone recognition when dialing voicemail or other automated systems.

To select a tone length:

1. From the Main Menu, highlight **Sounds** and press [OK].
2. Highlight **Tone Length** and press [OK].
3. Highlight **Short** of **Long** and press [OK].

Alert Notification

To enable or disable alert sounds:

1. From the Main Menu, highlight **Sounds** and press [OK].
2. Highlight **Alerts** and press [OK].
3. Select an alert by highlighting it and pressing [OK].
 - Services – An alert sounds when you exit or enter PCS CDMA or cellular coverage.
 - Messages – An alert sounds when you receive a voicemail or page/text message.
 - Minute Minder – Your phone beeps once a minute when you are on a call. (The beep is not audible to the other party.)
4. Highlight **ON** or **Off** and press [OK].

Display

For information on changing Backlight, Greeting or Contrast settings, see **Handy Tips**.

Display Menu

Security

Accessing the Security Menu

You must enter your lock code to view the Security menu. If you forget your lock code, try using the last four digits of your Social Security number, the last four digits of your Phone Number or 0000.

Security Menu

To access the Security menu:

1. From the Main Menu, select **SETTING & TOOLS** and press 4 – 2 (System – Security).
2. Enter your lock code.

Locking Your Phone

When your phone is locked, you can only make calls to 911, Customer Care and Special Numbers or receive incoming calls.

To lock your phone:

1. From the Security menu, highlight **Lock Phone** and press [OK].
2. Highlight **Lock Now** or **On Power up** and press [OK]. If you select On Power Up, the phone will be locked each time it power up.

Unlocking Your Phone

1. Highlight **Unlock** and press [OK].
2. Enter your lock code.

Changing the Lock Code

To change your lock code:

1. From the Security menu, highlight **Change Lock** and press [OK].
2. Enter your new lock code.
3. Reenter your new lock code.

Answering Your Phone with the Hands-Free Car Kit

You can select different answering options when your phone is connected to the Hands-Free Car Kit.

To answer calls automatically or by pressing any key:

1. From the Main Menu, highlight **Setup** and press [OK].
2. Highlight **Car Use** and press [OK].

To select an option, highlight it and press [OK].

- Any Key Answer - You can answer calls by pressing any key (not including the [CLR] key, Mouse Key or Volume Control keys).
 - Auto Answer - Your phone answers incoming calls automatically after five seconds.
3. Highlight **On** and press [OK].

To disable an option, follow steps 1 and 2 and select Off.



Safety

FCC Hearing-Aid Compatibility (HAC) Regulations for Wireless Devices

On July 10, 2003, the U.S. Federal Communications Commission (FCC) Report and Order in WT Docket 01-309 modified the exception of wireless phones under the Hearing Aid Compatibility Act of 1988 (HAC Act) to require digital wireless phones be compatible with hearing-aids. The intent of the HAC Act is to ensure reasonable access to telecommunications services for persons with hearing disabilities.

While some wireless phones are used near some hearing devices (hearing aids and cochlear implants), users may detect a buzzing, humming, or whining noise. Some hearing devices are more immune than others to this interference noise, and phones also vary in the amount of interference they generate.

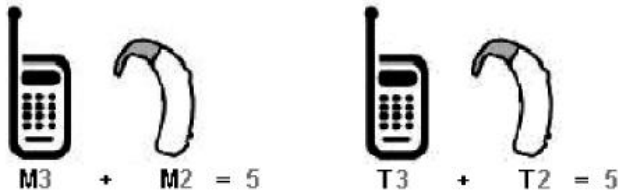
The wireless telephone industry has developed a rating system for wireless phones, to assist hearing device users find phones that may be compatible with their hearing devices. Not all phones have been rated. Phones that are rated have the rating on their box or a label located on the box.

The ratings are not guarantees. Results will vary depending on the user's hearing device and hearing loss. If your hearing device happens to be vulnerable to interference, you may not be able to use a rated phone successfully. Trying out the phone with your hearing device is the best way to evaluate it for your personal needs.

M-Ratings: Phones rated M3 or M4 meet FCC requirements and are likely to generate less interference to hearing devices than phones that are not labeled. M4 is the better/higher of the two ratings.

T-Ratings: Phones rated T3 or T4 meet FCC requirements and are likely to generate less interference to hearing devices than phones that are not labeled. T4 is the better/higher of the two ratings.

Hearing devices may also be rated. Your hearing device manufacturer or hearing health professional may help you find this rating. Higher ratings mean that the hearing device is relatively immune to interference noise. The hearing aid and wireless phone rating values are then added together. A sum of 5 is considered acceptable for normal use. A sum of 6 is considered for best use.



In the above example, if a hearing aid meets the M2 level rating and the wireless phone meets the M3 level rating, the sum of the two values equal M5. This is synonymous for T ratings. This should provide the hearing aid user with “normal usage” while using their hearing aid with the particular wireless phone. “Normal usage” in this context is defined as a signal quality that is acceptable for normal operation.

The M mark is intended to be synonymous with the U mark. The T mark is intended to be synonymous with the UT mark. The M and T marks are recommended by the Alliance for Telecommunications Industries Solutions (ATIS). The U and UT marks are referenced in Section 20.19 of the FCC Rules. The HAC rating and measurement procedure are described in the American National Standards Institute (ANSI) C63.19 standard.

To ensure that the Hearing Aid Compatibility rating for your phone is maintained, secondary transmitters such as Bluetooth

and WLAN components must be disabled during a call. See Page 86 for instructions to disable these components.

For information about hearing aids and digital wireless phones

FCC Hearing Aid Compatibility and Volume Control

<http://www.fcc.gov/cgb/dro/hearing.html>

Gallaudet University, RERC

<http://tap.Gallaudet.edu/DigWireless.KS/DigWireless.htm>

Hearing Loss Association of America [HLAA]

<http://www.hearingloss.org/learn/cellphonetech.asp>

The Hearing Aid Compatibility FCC Order

http://hraunfoss.fcc.gov/edocs_public/attachmatch/FCC-03-168A1.pdf