



PHONECELL® SX5P

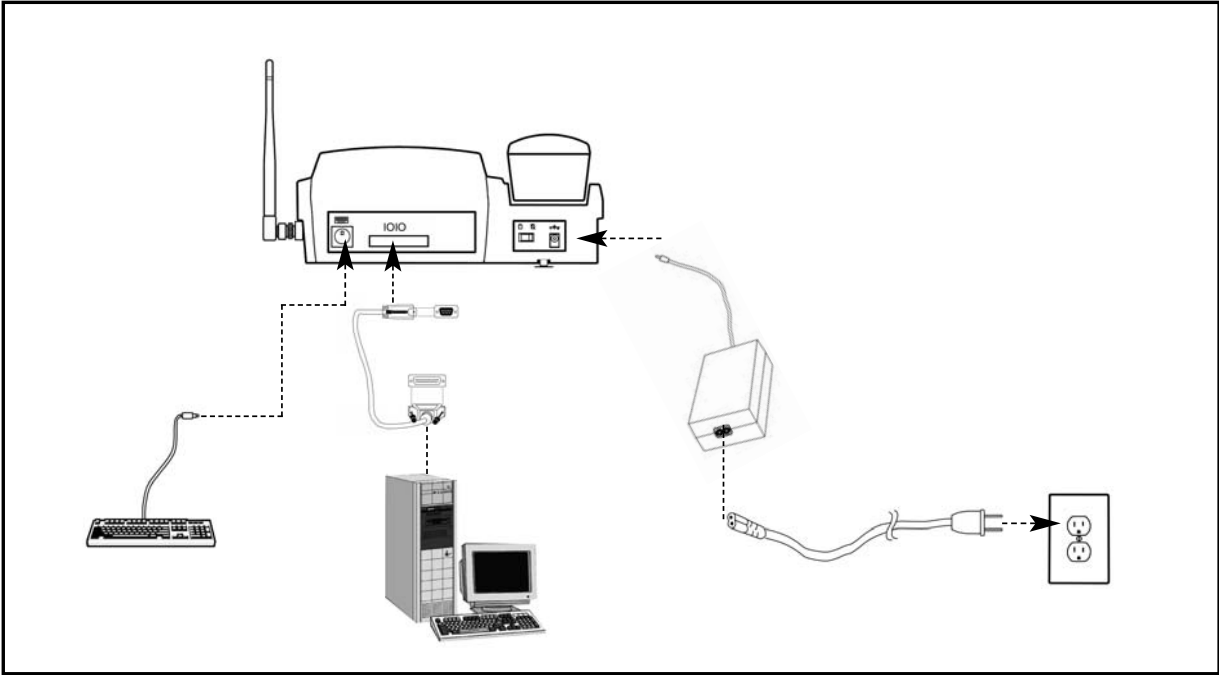
CDMA2000 1X

- **Fixed Wireless Phone**

800/1900 MHz CDMA

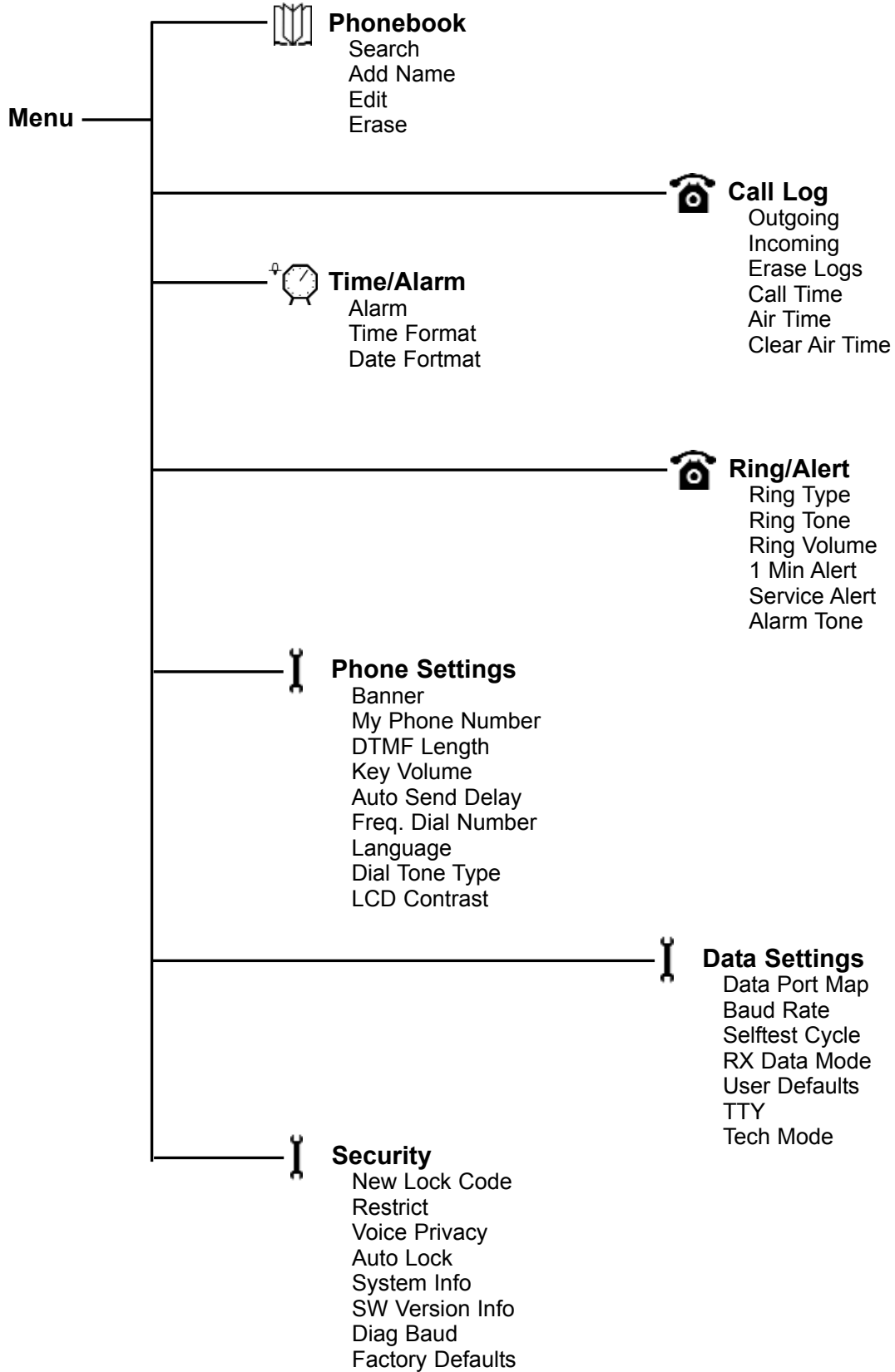
USER MANUAL

QUICK CONNECTION GUIDE



Fixed Wireless Phone

SX5 MENU STRUCTURE



CONTENTS



Phonecell® SX5 Desktop Phone



Spike Antenna



Power Supply



AC Power Cord

Before installing your **Phonecell® SX5**, carefully remove the contents from the shipping carton and check for evidence of shipping damage. **If damage is found, contact your Authorized Telular Distributor or shipping agent immediately.**

SAFE OPERATION INSTRUCTIONS

IMPORTANT! Before installing or operating this product, read the **SAFETY INFORMATION** section of this manual.

- Install unit indoors.
- Install unit on hard, flat surface for proper ventilation.
- Do not expose unit to rain or moisture.
- Do not place unit on or close to sources of heat

PLEASE SEE THE IMPORTANT NOTICES SECTION OF THIS MANUAL FOR IMPORTANT INFORMATION ON USE, WARRANTY AND INDEMNIFICATION

IMPORTANT NOTICES

TERMS AND CONDITIONS FOR USE OF PHONECELL® PRODUCTS ("Product")

These Terms and Conditions are a legal contract between you and Telular Corporation for the title to and use of the Product. BY RETAINING AND USING THE PRODUCT AFTER RECEIPT OF IT, YOU AGREE TO THE TERMS AND CONDITIONS INCLUDING WARRANTY DISCLAIMERS, LIMITATIONS OF LIABILITY AND INDEMNIFICATION PROVISIONS BELOW. IF YOU DO NOT AGREE TO THE TERMS AND CONDITIONS, DO NOT USE THE PRODUCT AND IMMEDIATELY RETURN THE UNUSED PRODUCT FOR A COMPLETE REFUND. You agree to accept sole responsibility for any misuse of the Product by you; and, in addition, any negligent or illegal act or omission of your or your agents, contractors, servants, employees, or other users of the Product so long as the Product was obtained from you, in the use and operation of the Product.

INDEMNIFICATION OF TELULAR CORPORATION ("TELULAR")

YOU SHALL INDEMNIFY, DEFEND AND HOLD HARMLESS TELULAR FOR ANY OF THE COST, INCLUDING REASONABLE ATTORNEYS' FEES, AND FROM CLAIMS ARISING OUT OF YOU, YOUR CLIENTS' OR OTHER THIRD PARTIES' USE OR OPERATION OF THE PRODUCT: (i) FOR MISUSE OR IN A MANNER NOT CONTEMPLATED BY YOU AND TELULAR OR INCONSISTENT WITH THE PROVISIONS OF THIS MANUAL; (ii) IN AN ILLEGAL MANNER OR AGAINST PUBLIC POLICY; (iii) IN A MANNER SPECIFICALLY UNAUTHORIZED IN THIS MANUAL; (iv) IN A MANNER HARMFUL OR DANGEROUS TO THIRD PARTIES; (v) FROM CLAIMS BY ANYONE RESPECTING PROBLEMS, ERRORS OR MISTAKES OF THE PRODUCT; OR (vi) COMBINATION OF THE PRODUCT WITH MATERIAL, MODIFICATION OF THE PRODUCT OR USE OF THE PRODUCT IN AN ENVIRONMENT NOT PROVIDED, OR PERMITTED, BY TELULAR IN WRITING. THE PARTIES SHALL GIVE EACH OTHER PROMPT NOTICE OF ANY SUCH COST OR CLAIMS AND COOPERATE, EACH WITH THE OTHER, TO EFFECTUATE THIS INDEMNIFICATION, DEFENSE AND HOLD HARMLESS.

TELULAR CORPORATION

Corporate Headquarters

647 North Lakeview Parkway
Vernon Hills, Illinois 60061, USA

Technical Support

Tel: 847-247-9400 • Fax: 847-247-0021

E-mail: support@telular.com • http://www.telular.com

TABLE OF CONTENTS

QUICK CONNECTION GUIDEi

SX5 MENU STRUCTUREiii

CONTENTSiv

SAFE OPERATION INSTRUCTIONSiv

IMPORTANT NOTICES.....iv

SETUP 1

 RUIM Card Installation.....1

 Emergency Batteries1

 Location and Setup.....2

 Connect the Handset.....2

 Desk-Mounting.....3

 Wall-Mounting.....4

 Connect the SX5 to AC Power5

GETTING TO KNOW YOUR SX5 6

 Function Keys6

 LCD Screen Icons.....7

 Service Indication7

CALL FUNCTIONS 8

 Making Calls8

 Receiving Calls8

 Ending Calls.....8

 In-Call Functions.....8

 Voice Mail Access9

PHONE BOOK FEATURES10

 Searching the Phone Book.....10

 Adding an Entry into the Phone Book10

 Edit Phone Book Entry.....11

 Erase a Phone Book Entry11

CALL LOG FEATURES 11

 View Outgoing Calls.....11

 View Incoming Calls12

 Erase All Call Logs12

 View Last Call Time12

 View Total Air Time12

 Clear Air Time12

TIME / ALARM FEATURES 13

 Alarm.....13

 Time Format.....13

 Date Format.....13

RING / ALERT FEATURES 14

 Ring Type.....14

 Ring Tone.....14

 Ring Volume14

 One Minute Alert.....14

 Service Alert.....14

Alarm Tone.....	15
PHONE SETTINGS.....	15
Banner	15
My Phone Number Display.....	15
DTMF Length.....	15
Key Volume.....	15
Auto Send Delay.....	15
Frequently Dialed Number.....	16
Change Language	16
Dial Tone Type	16
LCD Contrast	16
DATA SETTINGS	17
Data Port Type.....	17
Baud Rate.....	17
Self Test	17
RX Data Mode	17
User Defaults	17
TTY	18
SECURITY SETTINGS.....	18
New Lock Code	18
Restrict Calls.....	18
Voice Privacy	18
Voice Privacy Alert.....	18
Auto Lock.....	19
SW Version Information	19
Diagnostic Baud.....	19
Factory Defaults	19
SX5 TROUBLESHOOTING	20
CONFORMANCE STATEMENTS	21
SAFETY INFORMATION	21
WARRANTY	23

Preliminary

SX5 SETUP

RUIM Card Installation

The SX5 unit supports the RUIM card to store account information. If your unit has an RUIM card, follow the instructions below.

1. Remove the power supply if it has already been connected. The power supply must be removed whenever a RUIM Card is removed or installed.
2. Remove the RUIM compartment cover by removing the screw - **see Figure 1**.
3. Open the RUIM compartment holder.
4. Line up the RUIM card with the arrow on the RUIM card holder - **see Figure 2**.
5. Gently insert the RUIM card in the slot of the RUIM card holder.
6. Close the RUIM card holder.

NOTE: Do not force the RUIM card holder shut. Make sure the RUIM card is aligned properly with the directional arrow on the holder.

7. Reattach the RUIM compartment cover with the screw.

Emergency Batteries

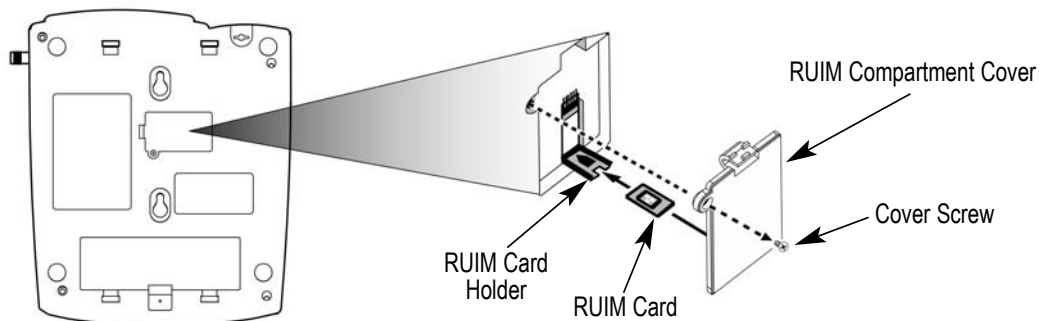


Figure 1 - RUIM compartment cover.

Figure 2 - RUIM card installation.

Install Batteries

1. Remove the battery access door screw located on the bottom of the unit - **see Figure 3**.
2. Open the battery compartment by lifting the access tab in the center of the battery compartment – see Figure 3. A new unit may require some extra force to open the compartment.
3. Install 4 “AA” alkaline batteries (not supplied). and re-secure the door with screw.



WARNING!

Only “AA” alkaline batteries are to be used with the Phonecell® SX5. Use of any other batteries may result in fire and/or other damage to the unit.

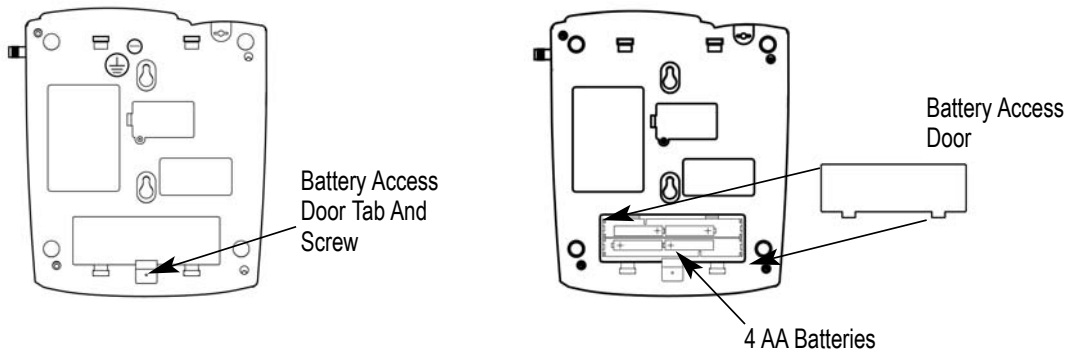


Figure 3 – Battery access door.

Figure 4 - Battery installation.

Battery Operation

The unit will not automatically switch from AC to battery upon loss of AC power. The AC/Battery switch must be changed manually to the battery position - **see Figure 5**. Battery power will provide up to 4 hours of talk time and 11 hours of standby.

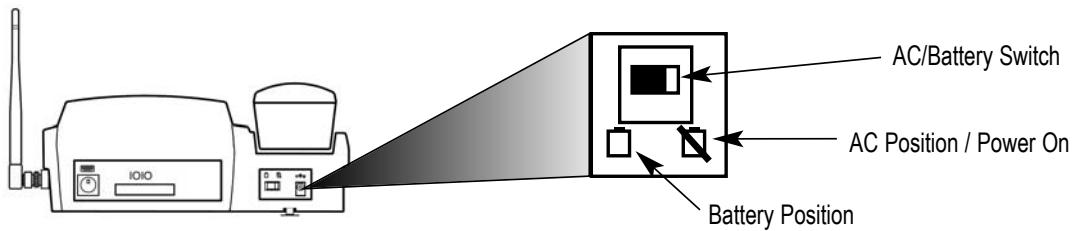


Figure 5 – AC battery Switch.

Location and Setup

The SX5 comes with a standard spike antenna (TNC).

1. Attach and finger-tighten the antenna - **see Figure 6**. Do not over-tighten the antenna.
2. Select a location that is above ground and as close to windows (or exterior walls) as possible to get the best signal - **see Figure 7**.

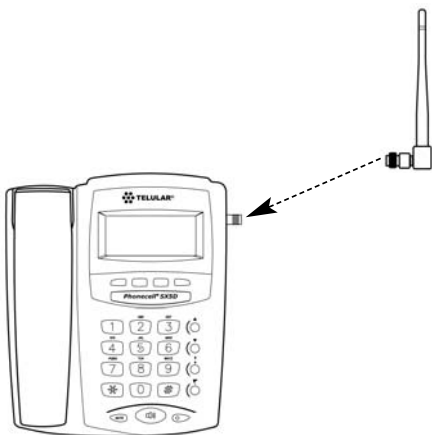


Figure 6 - Attach the antenna.

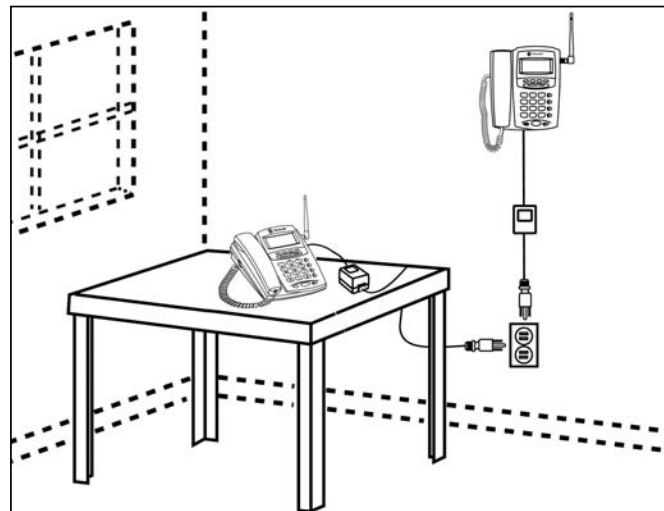


Figure 7 - SX5 location.

Connect the Handset

Before you can use the SX5, you must connect the handset cable.

1. Connect the handset cable to the phone jack - **see Figure 8**.
2. Connect the handset cable to the handset - **see Figure 8**.

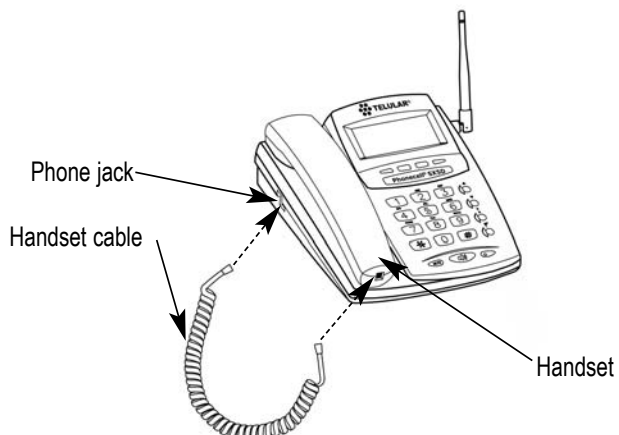


Figure 8 – SX5 handset connection.

Desk-Mounting

A wedge is included with the SX5 to be used to position the SX5 for easier viewing of the LCD screen and keypad. Attaching the wedge is optional. To attach the wedge, use the following instructions.

1. Slide the wedge tabs on the thin end of the wedge into the bottom tab slots on the SX5 - **see Figure 9.**

NOTE: Holding the wedge at an angle makes it easier to slide the wedge tabs into the bottom tab slots.

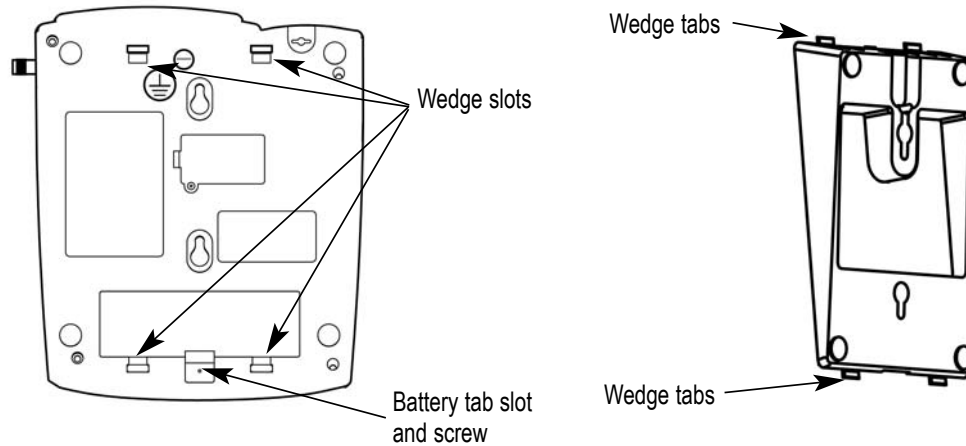


Figure 9 - Battery slot and wedge slots.

2. Snap the wedge tabs on the thick end of the wedge into the top tab slots - **see Figure 10.**

NOTE: The wedge will fit snugly, so it may be necessary to press the thick end of the wedge towards the bottom tab slots (if the wedge tabs at the thin end have been inserted) in order to snap it into the top tab slots.

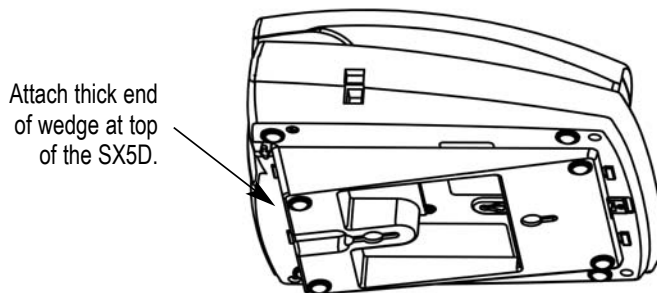
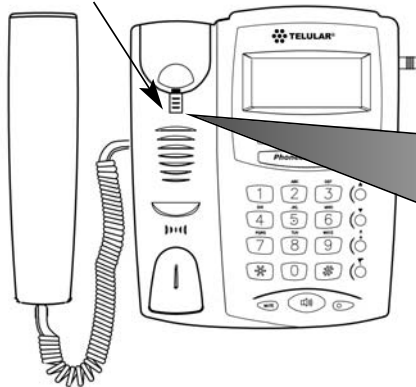


Figure 10 - Wedge attached for desk-mounting.

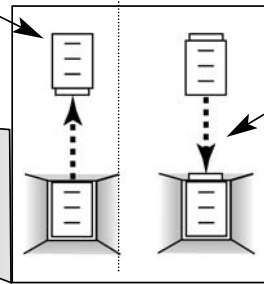
Wall-Mounting

1. Remove the mounting clip from the cradle and re-insert it with the tab pointing up - see **Figures 11 and 12.**

Mounting Clip in Cradle (tab up)



Remove Mounting Clip from the Cradle (tab down)



Insert Mounting Clip into the Cradle (tab up)

Figure 11 – Handset mounting clip assembly.

Figure 12 – Handset mounting clip for wall-mount.

2. Slide the wedge tabs on the thin end of the wedge into the bottom tab slots on the SX5 - see **Figure 13.**

NOTE: Holding the wedge at an angle makes it easier to slide the wedge tabs into the bottom tab slots.

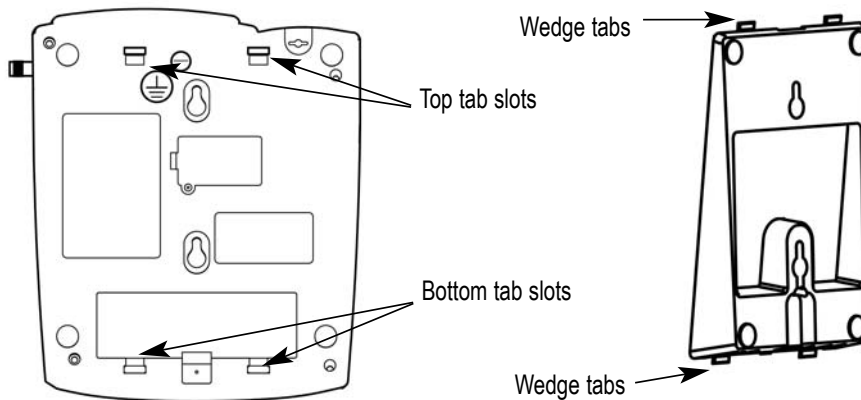
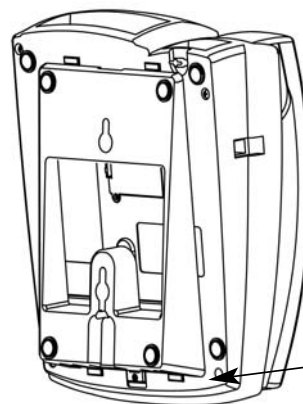


Figure 13 - Tab slots and wedge tabs.

3. Snap the wedge tabs on the thick end of the wedge into the top tab slots - see **Figure 14.** The wedge will fit snugly, so it may be necessary to press the thick end of the wedge towards the bottom tab slots (if the wedge tabs at the thin end have been inserted) in order to snap it into the top tab slots.



Attach thick end of wedge at bottom of the SX5.

Figure 14 - Wedge attached for wall-mounting.

4. Mark two hole locations 83 mm (3-1/4 inches) vertically apart and drill two holes into the wall.
5. Install the screws (not supplied) into the wall, leaving a gap of approximately 3 mm (1/8 inches) between the screw head and the wall.
6. Align the mounting holes with the screws and mount the SX5 onto the screws - **see Figures 15 and 16**.

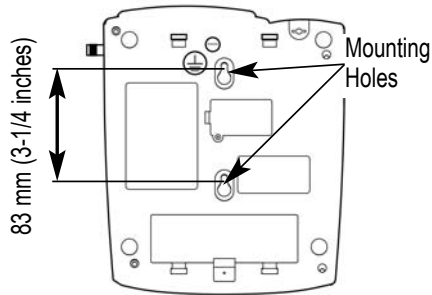


Figure 15 – SX5 mounting hooks.

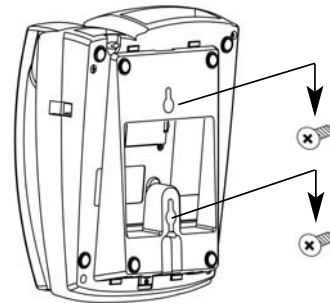


Figure 16 – Mount the SX5 onto the screws.

Connect the SX5 to AC Power

1. A protective earth (safety ground) terminal screw marked with a protective earth symbol is provided on the back of the SX5 - **see Figure 17**. Connect this terminal to a good earth ground (i.e., a cold water pipe) by means of an 18 gauge or heavier insulated wire. The wire insulation should be green with a yellow stripe to indicate that this is a protective earth (safety ground) connection.
2. Connect the barrel connector of the power supply to the AC power input on the rear panel of the SX5 - **see Figure 17**.
3. Plug the AC power cord into the power supply.
4. Turn the AC/Battery switch to the AC position.
5. Plug the AC power cord into the wall socket. The SX5 will power up automatically.
6. Check the cellular signal strength and move the unit until the best signal possible is achieved - see the *Service Indication* section of this manual.

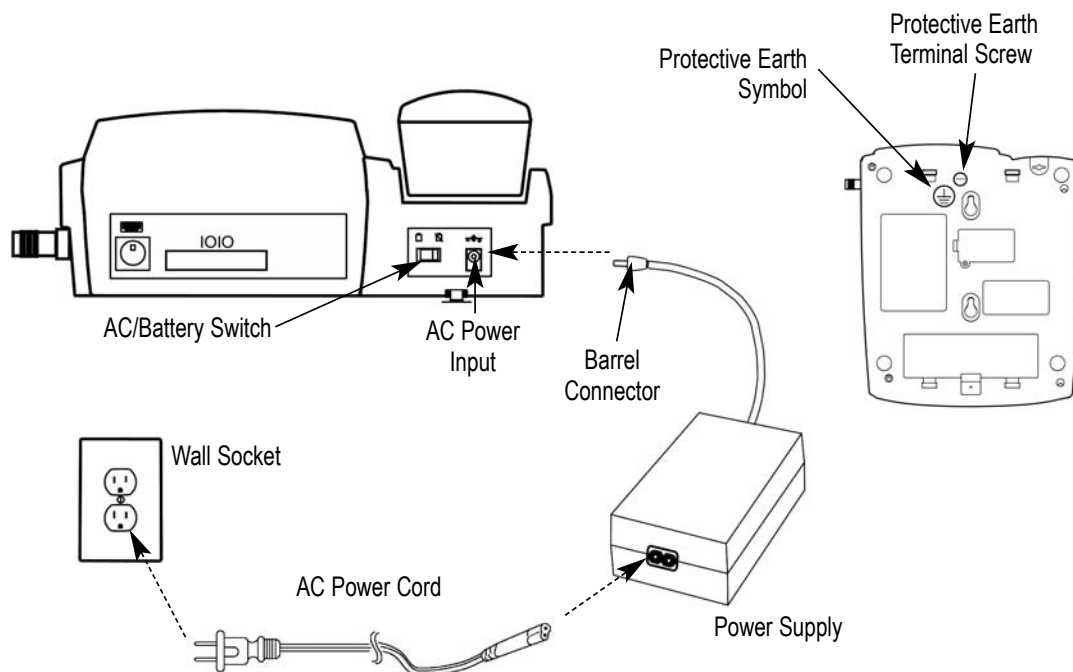


Figure 17 – SX5 AC power connection.

GETTING TO KNOW YOUR SX5P

Function Keys

Operation of the SX5 is accomplished through the function keys on the keypad of the unit - see **Figure 18**.

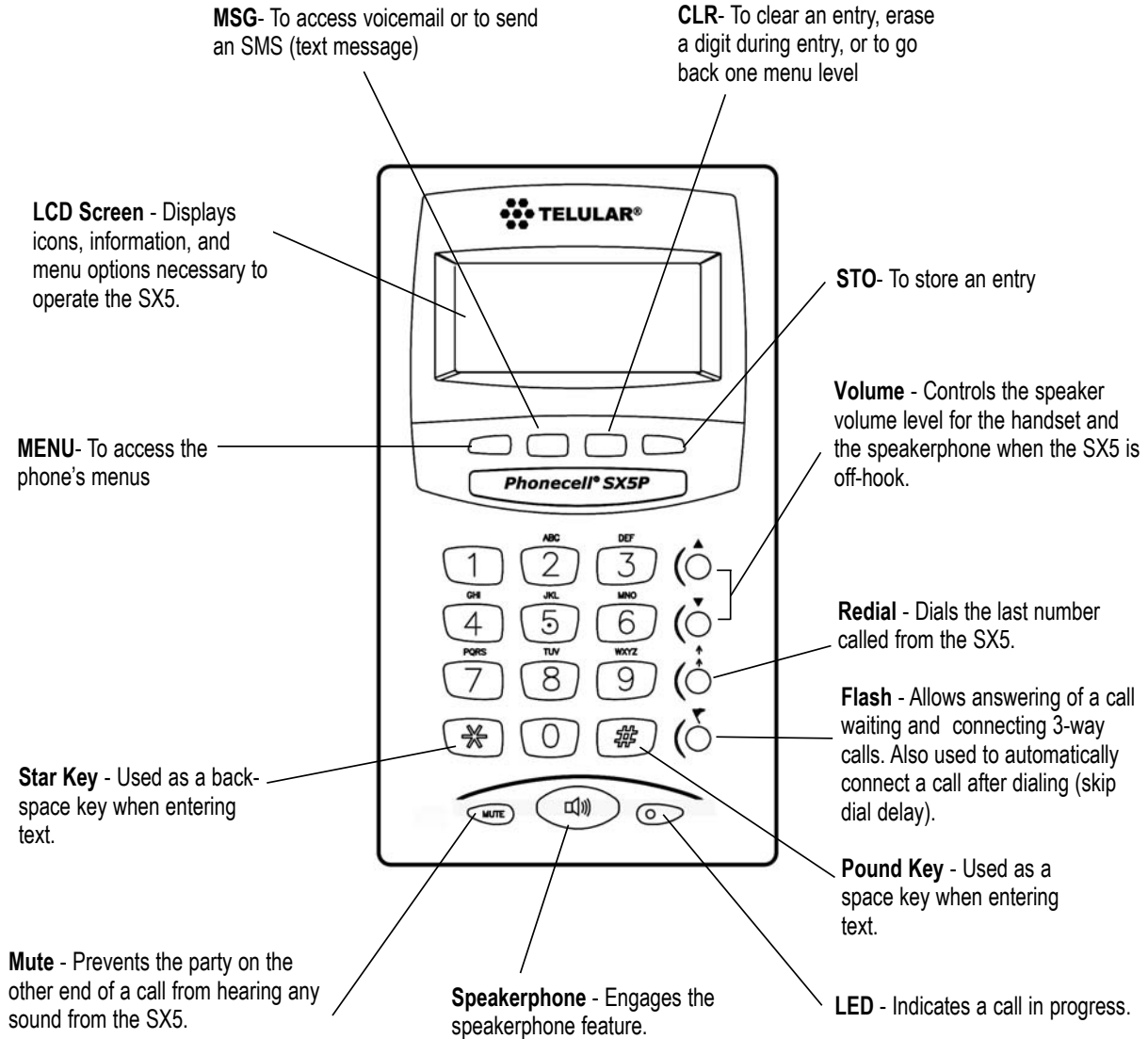


Figure 18 – SX5 keypad and function keys.

LCD Screen Icons

Icons displayed on the LCD screen indicate the features in use, the status of the phone, signal strength and battery status - see **Figure 19**.

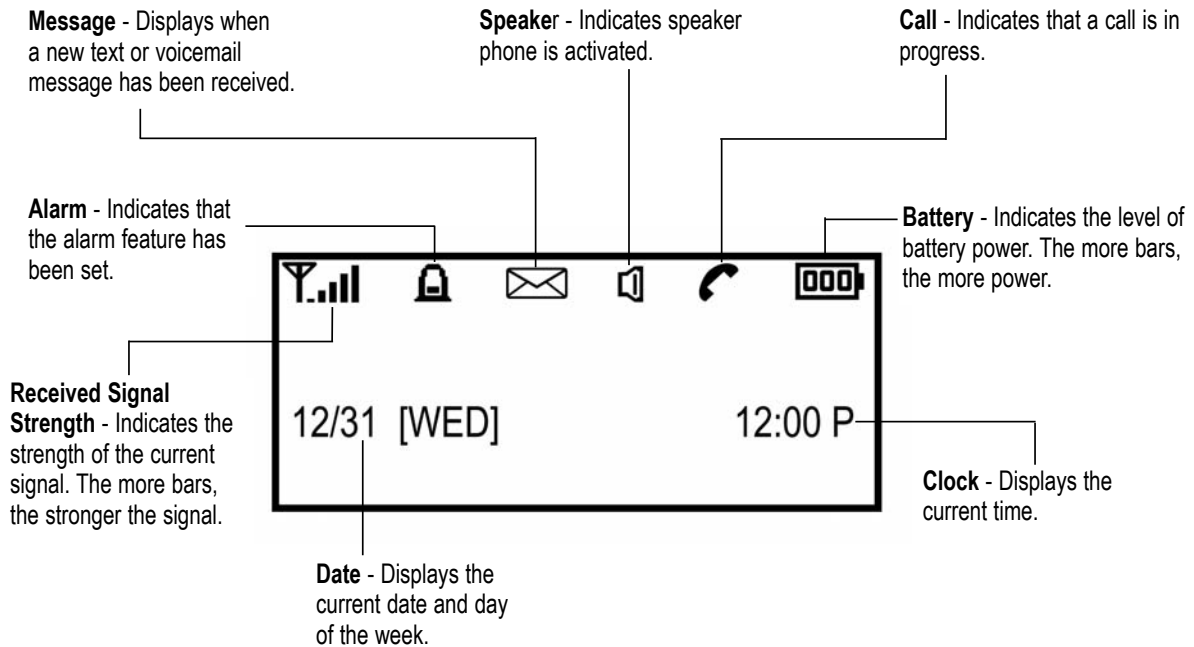


Figure 19 – SX5 LCD screen icons.

Service Indication

Full Service

When powered on, the SX5 will display the software version and the LED will light up. After a few seconds, the banner and current date and time will display. If service is available, the antenna icon will display indicator bars. The number and height of the indicator bars increases as the signal grows stronger (the more bars, the better the signal).

No Service

When no service is available, the antenna icon will not display indicator lines. Contact your service provider to verify cellular service is activated. No calls can be made in this condition.

Preliminary

CALL FUNCTIONS

Making Calls

1. Pick up the handset or press the **SPEAKERPHONE** key. The SX5 is now “off-hook.”
2. Listen for dial tone.
3. Dial the phone number. The dialed number will be displayed. The name will also be displayed if it is stored in the phonebook.

Correct Dialing Errors

- To erase one digit, press the **CLR** key once.
- To erase all digits, press and hold down the **CLR** key until all digits are erased.

Redial the Last Telephone Number Dialed

1. Pick up the handset or press the **SPEAKERPHONE** key. The SX5 is now “off-hook.”
2. Press the **REDIAL** key.

Receiving Calls

When there is an incoming call, the SX5 rings, an incoming call notification displays the call type and Caller ID information (if available), and the LED blinks.

1. Pick up the handset or press the **SPEAKERPHONE** key.
2. Begin talking.

Receive a Call When Caller ID is Activated

The Caller ID feature displays the caller's number when the SX5 rings. If the caller's name and number are stored together in the SX5 phonebook, the caller's name and number will be displayed. Contact your service provider to activate this feature.

NOTE: If there are missed calls (calls not answered), “**MISSED CALLS**” will be displayed with the number of calls missed. See the *Call Logs* section of this manual for more information.

Ending Calls

Hang up the phone by either placing the handset back onto the SX5 cradle or press the **SPEAKERPHONE** key if using the speakerphone.

In-Call Functions

Mute a Call

1. While in a call, press the **MUTE** key. A notification will display in the upper right corner of the LCD screen.
2. Press the **MUTE** key again to un-mute the microphone.

Adjust Volume

1. While in a call, press the **Volume** keys to raise or lower the handset/speakerphone volume.

Call Waiting

The flash key is used to answer call waiting and to switch between calls. Contact your service provider regarding the availability of the call waiting feature.

3-Way Calling

Contact your service provider regarding the availability of 3-way calling.

To perform a 3-way call:

1. Make the first call and wait until it connects.
2. After the first call is connected, dial the second number.
3. Press the **FLASH** key. This connects the second call and puts the first call on hold.
4. Wait for the second call to connect.
5. After you are connected to the second call, press the flash key, which then connects the first

call and completes the 3-way call.

Voicemail Access

Contact your service provider regarding the availability of voicemail.

1. *Press* **MSG**.
2. *Select* **1: Voice Mail**.
3. To listen to your voicemail, *Select* **1: Listen**.
4. If you have deleted all your messages and the message indicator does not go away after an hour, press 2: Erase Msg Ind.

PHONE BOOK

The SX5 can be programmed to store frequently called numbers via an electronic phone book.

To access this feature press the **MENU** button on the deskphone.

The SX5P phone book can hold up to 99 entries.

A phone book entry can be speed dialed as follows:

For entries 1-9, lift the handset and hold down the location number until it dials.

For entries 10-99, lift the handset, press the first digit and then hold down the 2nd digit until it dials.

Searching the Phone Book

Start by pressing **MENU**

1. *Select* **1:Phone Book**

2. *Select* **1: Search**

There are 3 options for conducting a search of the electronic phone book:

1. **All** - displays all entries from location **01 through 99**

Use Up and down arrows to select the location and hit **STO** to select it.

2. **Name** - enter in the characters to search for and hit **STO** to search.

3. **Location** - enter the 2-digit location **01 through 99**

Adding an entry into the Phone Book

Start by pressing **MENU**

1. *Select* **1:Phone Book**

2. *Select* **2: Add**

3. Enter the phone number to be stored. The **# key** can be used to insert a pause.

4. Press **STO**

5. Enter the name to be stored. Press a key multiple times to display the desired letter on that key.

* **key** = **backspace**

key = **space**

MSG key = shift between **UPPERCASE** and **lowercase** letters

6. When the unit displays, "*Location auto=XX*", press **STO** or enter the desired location number.

7. When the unit displays, "Make Secret?" press **STO** if the entry can be displayed in the phonebook, otherwise if you want it to be hidden, hit the arrow down to *YES* and hit **STO**.

Edit a Phone Book Entry

Start by pressing **MENU**

1. *Select* **1:Phone Book**
2. *Select* **3: Edit**

There are 3 options for editing an entry:

1. **All** - displays all entries from location **01 through 99**

Use *Up and down* arrows to select the location and press **STO** to select it.

2. **Name** - enter in the characters to search for and press **STO** to search.
3. **Location** - enter the 2-digit location **01 through 99**

Erase a Phone Book Entry

Start by pressing **MENU**

1. *Select* **1:Phone Book**
2. *Select* **4: Erase**

There are 3 options for erasing an entry:

1. **All** - displays all entries from location **01 through 99**

Use *Up and down* arrows to select the location and press **STO** to select it.

2. **Name** - enter in the characters to search for and press **STO** to search.
3. **Location** - enter the 2-digit location **01 through 99**

CALL LOGS

The SX5 saves a log of the last 10 outgoing calls and the last 10 incoming calls.

View Outgoing Calls

Start by pressing **MENU**

1. *Select* **2:Call Logs**
2. *Select* **1: Outgoing**

3. Use the *up and down* arrows to select the desired call and press **STO** to view it.

Note: You can hit the **FLASH** key to dial that number.

View Incoming Calls

Start by pressing **MENU**

1. *Select* **2:Call Logs**
2. *Select* **2: Incoming**
3. Use the up and down arrows to select the desired call and press **STO** to view it.

Note: You can hit the **FLASH** key to dial that number.

Erase All Call Logs

Start by pressing **MENU**

1. *Select* **2:Call Logs**
2. *Select* **3: Erase logs**
3. Press **STO** to erase the logs.

View Last Call Time

Start by pressing **MENU**

1. *Select* **2:Call Logs**
2. *Select* **4: Call Time**

This displays the duration of the previous call.

View Total Air Time

Start by pressing **MENU**

1. *Select* **2:Call Logs**
2. *Select* **5: Air Time**

This displays the total airtime that the phone has used since the last time it was cleared.

This is a calculation performed by the phone and may be different than the network's calculation.

Clear Air Time

Start by pressing **MENU**

1. *Select* **2:Call Logs**
2. *Select* **6: Clear Air Time**

This option will clear the phone's memory of how much airtime has been used.

TIME / ALARM

The SX5 allows you to set an alarm clock that can be used one time or for every day

Alarm

Start by pressing **MENU**

1. **Select 3:Time / Alarm**
2. **Select 1: Alarm**

Time Format

Start by pressing **MENU**

1. **Select 3:Time / Alarm**
2. **Select 2: Time Format**

This allows you to set the time format to be 12-hour or 24-hour format.

Note: The current time is set by the network and therefore cannot be set on the phone.

Date Format (option 3)

Start by pressing **MENU**

1. **Select 3:Time / Alarm**
2. **Select 3: Date Format**

This allows you to set the date format to be **MM/DD** or **DD/MM**.

RING / ALERT

The SX5 is capable of supporting multiple ring tones and types of alerts. To adjust these settings follow these instructions.

Ring Type

Start by pressing **MENU**.

1. **Select 4: Ring / Alert**
2. **Select 1: Ring Type**
3. **Select** the desired option and press **STO** to save.

There are 2 options for ring type:

1. **Sound + LED**
2. **LED (silent)**

Ring Tone

Start by pressing **MENU**.

1. **Select 4: Ring/Alert**
2. **Select 2: Ring Tone**
3. Use the *up / down* arrows to select the desired ring tone and press **STO** to save.

Ring Volume

Start by pressing **MENU**.

1. **Select 4: Ring/Alert**
2. **Select 3: Ring Volume**
3. Adjust with *up / down* arrows and hit **STO** to save.

One Minute Alert

The 1-minute alert beep alerts the user after every minute during a call.

1. Start by pressing **MENU**.
2. **Select 4: Ring/Alert**
3. **Select 4: 1 Min Alert**
4. **Select ON or OFF** and press **STO**.

Service Alert

The Service Alert is an alert that sounds when entering or leaving a service area.

1. Start by pressing **MENU**.
2. **Select 4: Ring / Alert**
3. **Select 5: Svc Alert**

Preliminary

Alarm Tone

The alarm tone is the sound that the alarm clock makes when it rings.

1. Start by pressing **MENU**.
2. *Select 4: Ring / Alert*
3. *Select 6: Alarm Tone*
4. Use the *up / down* arrows to select the desired ring tone and press **STO** to save.

PHONE SETTINGS

Banner

The banner is the text on the screen shown when the phone is not in use. This can be used to personalize your phone.

1. Start by pressing **MENU**.
2. *Select 5: Phone Settings.*
3. *Select 1: Banner.*

My Phone # (display only)

1. Start by pressing **MENU**.
2. *Select 5: Phone Settings.*
3. *Select 2: My Phone #.*

DTMF Length

Some applications may require changing the DTMF Length.

1. Start by pressing **MENU**.
2. *Select 5: Phone Settings.*
3. *Select 3: DTMF Length.*
4. *Select the desired option and press STO to save.*
 1. **Long**
 2. **Short (default)**
 3. **None**

Key Volume

The key volume is the loudness of the tones generated when you press the phone's keys.

1. Start by pressing **MENU**.
2. *Select 5: Phone Settings.*
3. *Select 4: Key Volume.*
4. Select the desired setting and press **STO** to save.

Auto Send Delay

The auto send delay is the amount of time the unit waits after you have stopped entering digits, before dialing the number.

1. Start by pressing **MENU**.
2. *Select 5: Phone Settings.*
3. *Select 5: Auto SND Delay.*
4. Enter the desired setting (between 2 and 20 seconds) and press **STO** to save.

Frequently Dialed Number

If you dial a phone number twice and stay connected for at least 15 seconds, the unit will remember that phone number and automatically send it without delay. This feature may be enabled or disabled.

1. Start by pressing **MENU**.
2. *Select 5: Phone Settings.*
3. *Select 6: Freq Dial Num.*
4. To enable this feature, *Select 1: On.*
To disable this feature, *Select 2: Off.*

Change Language Displayed On LCD

The SX5 is capable of displaying multiple languages on the LCD screen.

1. Start by pressing **MENU**.
2. *Select 5: Phone Settings.*
3. *Select 7: Language.*
4. *Select* the desired setting and press **STO** to save.

Dial Tone Type

1. Start by pressing **MENU**.
2. *Select 5: Phone Settings.*
3. *Select 8: Dial Tone Type.*
4. *Select* the desired setting and press **STO** to save.
 1. **North America (low 350 Hz, high 440 Hz)**
 2. **Latin America (low 425 Hz, high 425 Hz)**
 3. **East Europe (low 425 Hz, high 425 Hz)**
 4. **China (low 450 Hz, high 450 Hz)**
 5. **Nicaragua (low 450 Hz, high 450 Hz)**
 6. **India (low 375.5 Hz, high 412.5 Hz)**

LCD Contrast

1. Start by pressing **MENU**.
2. *Select 5: Phone Settings.*
3. *Select 9: LCD Contrast*
4. *Select* the desired setting and press **STO** to save.

DATA SETTINGS

Data Port Type

1. Start by pressing **MENU**.
2. *Select* **6: Data Settings**.
3. *Select* **1: Data Port Type**.
4. *Select* the data cable being used and press **STO** to save.
 1. **USB**
 2. **RS232**

Baud Rate

Set the baud rate appropriate for the application. PC fax uses 19,200. For 1X data, use 115,200.

1. Start by pressing **MENU**.
2. *Select* **6: Data Settings**.
3. *Select* **2: Baud Rate**.
4. *Select* the desired baud rate and press **STO** to save.

Selftest cycle

The unit will perform a periodic self-test to ensure the proper operation of the phone. The default setting is 180 minutes (3 hours).

1. Start by pressing **MENU**.
2. *Select* **6: Data Settings**.
3. *Select* **3: Selftest cycle**
4. *Select* between **0** and **65535** minutes and press **STO** to save.

RX Data Mode

To receive data, you must set the RX data mode setting.

1. Start by pressing **MENU**.
2. *Select* **6: Data Settings**.
3. *Select* **4: RX Data Mode**.
4. *Select* the desired setting and press **STO** to save.

User Defaults

This setting is used to reset the user defaults.

1. Start by pressing **MENU**.
2. *Select* **6: Data Settings**.
3. *Select* **5: User Defaults**
4. *Select* **RESET** and press **STO** to save.

TTY (Text Telephone for the Deaf)

To use a TTY device with the SX5, a Telular SX5 data cable is required.

1. Start by pressing **MENU**.
2. *Select 6: Data Settings.*
3. *Select 6: TTY*
4. *Select the desired setting and press **STO** to save.*
 1. **TTY Off**
 2. **TTY Only**
 3. **TTY VCO (TTY + talk)**
 4. **TTY HCO (TTY + hear)**

SECURITY

New Lock Code

The lock code is a 4-digit password used to prevent unauthorized access to the phone. This setting will allow you to change it. The default lock code is **0000**.

1. Start by pressing **MENU**.
2. *Select 7: Security.*
3. *Select 1: New Lock Code*

Restrict Calls

1. Start by pressing **MENU**.
2. *Select 7: Security.*
3. *Select 2: Restrict.*
4. *Select the desired option and press **STO** to save.*
 1. **Outgoing**
 2. **Incoming**

Voice Privacy

The cellular CDMA network offers inherent voice privacy. Check with your service provider for the availability of enhanced voice privacy mode. If Enhanced is selected, the phone will request Enhanced Voice Privacy and a "P" will be shown on the display if Enhanced Voice Privacy has been granted by the network.

1. Start by pressing **MENU**.
2. *Select 7: Security.*
3. *Select 3: Voice Privacy.*
4. *Select the desired option and press **STO** to save.*
 1. **Standard**
 2. **Enhanced**

Voice Privacy Alert

The cellular CDMA network offers inherent voice privacy. Check with your service provider for the availability of enhanced voice privacy mode.

1. Start by pressing **MENU**.
2. *Select 7: Security.*

3. *Select* **4: Voice Privacy Alert**.
4. *Select* the desired option and press **STO** to save.

Auto Lock

The Auto Lock setting determines whether the phone will automatically lock. This would require you to enter your lock code before being able to access the phone.

1. Start by pressing **MENU**.
2. *Select* **7: Security**.
3. *Select* **5: Auto Lock**.
4. *Select* the desired option and press **STO** to save.

Software Version Info

1. Start by pressing **MENU**.
2. *Select* **7: Security**.
3. *Select* **6: SW Version Info**.

Diagnostic Baud

This setting is used for diagnostic purposes.

1. Start by pressing **MENU**.
2. *Select* **7: Security**.
3. *Select* **7: Diag Baud**.

Factory Defaults

This setting is used to reset to the factory defaults.

1. Start by pressing **MENU**.
2. *Select* **7: Security**.
3. *Select* **8: Factory Defaults**.

SX5 TROUBLESHOOTING

Telephone Service is Not Working (Cannot make or receive calls)

- Make sure the SX5 powered on properly.
- Make sure any equipment that is externally connected to the SX5 is correctly connected.
- Test any externally connected equipment on a known system to verify operation.
- Do you have the antenna connected? If not, connect the antenna.
- Is service established with a service provider? If so, is there any service provider issue. Your service may be disconnected or not functioning properly. Contact your service provider if you think this is the problem.

Unable to Receive Calls

- Is the handset on the cradle? If not, place the handset on the cradle and try again.
- Is the SX5 making a loud repetitive tone (ROH)? Then either speakerphone or the handset is off hook. Hang-up and try again.

Unable to Make Calls

- If you do not hear standard dial tone when off hook, then your service has a problem. Contact your service provider if you think this is the problem.

Unable to Send or Receive Circuit Switched Data (CSD) Calls

- Is your computer connected to the data port of the SX5? If not, connect the computer with an appropriate data cable.
- Do you have CSD service on your wireless account? Contact your service provider for information.
- Is your computer configured properly to access data service with the SX5? Please reference the data sections of this manual for proper setup.

Moisture or Ventilation Problems

- Is moisture forming on or around the SX5? Remove any moisture with a clean dry towel and move the unit to a well ventilated area. Review the Temperature and Environment section of this manual for more information.

No Power

- Is the power supply connected to the unit? Make sure power is available and that the power supply is properly connected to the SX5.
- The power supply is connected but the unit still has no power. Make sure the circuit is functioning to the power supply. Check breakers & contact your power company. Power may be off at location.

CONFORMANCE STATEMENTS

FCC Part 15 Class B Compliance

This Phonicell® SX5 model has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC rules. Changes or modifications not expressly approved by Telular Corporation will void your authority to operate the equipment per FCC part 15 paragraph 15.21. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment OFF and ON, the user is encouraged to try to correct the interference by one or more of the following measures:

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

SAFETY INFORMATION

The Phonicell® SX5 functions as both a radio transmitter and receiver. When it is ON, the SX5 receives and sends out radio frequency (RF) energy. The SX5 CDMA unit operates in the frequency ranges of 824 MHz to 894 MHz and / or 1850 MHz to 1910 MHz. When you use the SX5, the cellular system handling your call controls the power level at which the unit transmits.

Exposure to RF (Radio Frequency) Energy

In 1991, the Institute of Electrical and Electronics Engineers (IEEE), and in 1992, the American National Standards Institute (ANSI), updated the 1982 ANSI Standard for safety levels with respect to human exposure to RF energy. After reviewing the available body of research, more than 120 scientists, engineers and physicians from universities, government health agencies and industry developed this updated Standard. In March, 1993, the U.S. Federal Communications Commission (FCC) proposed the adoption of this updated Standard.

The design of your Telular Phonicell® SX5 complies with this updated Standard. Of course, if you want to limit RF exposure even further than the updated ANSI Standard, you may choose to control the duration of your calls and operate your phone in the most power-efficient manner.

Safe Operation Requirement

The Phonicell® SX5 must be either wall mounted or desk mounted and should not be operated when any person is within 203 mm (8 inches) of the antenna.

Temperature and Environment

Operating Temperature: From -10°C to +50°C ; Up to 95% relative humidity (non-condensing).

Storage Temperature: From -40°C to +60°C; Up to 95% relative humidity (non-condensing).

Antenna Care and Replacement

Do not use the Phonicell® SX5 with a damaged antenna. If a damaged antenna comes into contact with the skin, a minor burn may result. Have your antenna replaced by a qualified technician immediately. Use only a manufacturer-approved antenna. Unauthorized antennas, modifications, or attachments could damage the Phonicell® SX5.

Driving

Check the laws and regulations on the use of cellular products in the areas where you drive. Some jurisdictions prohibit your using a cellular device while driving a vehicle. Even if your jurisdiction does not have such a law, we strongly suggest that, for safety reasons, the driver use extreme caution when operating the cellular device while the vehicle is in motion. Always obey the law.

Electronic Devices

Most modern electronic equipment is shielded from RF energy. However, RF energy from cellular

devices may affect inadequately shielded electronic equipment.

RF energy may affect improperly installed or inadequately shielded electronic operating and entertainment systems in motor vehicles. Check with the manufacturer or its representative to determine if these systems are adequately shielded from external RF energy. You should also check with the manufacturer of any equipment that has been added to your vehicle.

Consult the manufacturer of any personal medical devices (such as pacemakers, hearing aids, etc.) to determine if they are adequately shielded from external RF energy.

Turn your Phonedcell® SX5 OFF in health care facilities when any regulations posted in the areas instruct you to do so. Hospitals or health care facilities may be using equipment that could be sensitive to external RF energy.

Aircraft

Turn OFF your Phonedcell® SX5 before boarding any aircraft.

- Use it on the ground only with crew permission.
- Do not use it in the air.

To prevent possible interference with aircraft systems, U.S. Federal Aviation Administration (FAA) regulations require you to have permission from a crew member to use your cellular phone (or any other cellular product) while the plane is on the ground. To prevent interference with aircraft systems, FCC regulations prohibit using your cellular device while the plane is in the air.

Children

Do not allow children to play with your Phonedcell® SX5 to prevent damage to the unit.

Blasting Areas

Construction crews often use remote control RF devices to set off explosives. Therefore, to avoid interfering with blasting operations, turn your Phonedcell® SX5 OFF when in a "blasting area" or in areas posted: "Turn off two-way radio."

Potentially Explosive Atmospheres

Turn your Phonedcell® SX5 OFF when in any area with a potentially explosive atmosphere. It is rare, but your Phonedcell® SX5 or its accessories could generate sparks. 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; 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.

Do not transport or store flammable gas, liquid or explosives in the area of your Phonedcell® SX5 or accessories.

Vehicles using liquefied petroleum gas (such as propane or butane) must comply with the National Fire Protection Standard (FPA-58). For a copy of this standard, contact the National Fire Protection Association, One Batterymarch Park, Quincy, MA 02269, Attn: Publications Sales Division.

WARRANTY

I. WHAT THIS WARRANTY COVERS AND FOR HOW LONG:

TELULAR CORPORATION ("Telular") warrants to a distributor Buyer, or to a customer only if the customer is a Buyer directly from Telular, that the Products (including accessories) shall comply with the applicable Specifications and shall be free from defects in material and workmanship under normal use and service for a period of fifteen (15) months from date of shipment from Telular. Telular, at its option, shall at no charge either repair, replace or refund the purchase price of the Product during the warranty period, provided it is returned by Buyer in accordance with the terms of this warranty to the Telular designated repair center. Repair or replacement, at Telular's option, may include the replacement of parts, boards or Products with functionally equivalent reconditioned items. Repaired and replacement items are warranted for the balance of the original warranty period. All replaced items shall become the property of Telular. **SUCH ACTION ON THE PART OF TELULAR SHALL BE THE FULL EXTENT OF TELULAR'S LIABILITY HEREUNDER, AND BUYERS EXCLUSIVE REMEDY.** Buyer shall be responsible for all costs and expenses incurred by Buyer including without limitation any handling, labor or transportation charges. **OTHER THAN AFORESAID, THIS EXPRESS WARRANTY IS EXTENDED BY TELULAR TO BUYER ONLY AND NOT TO BUYER'S CUSTOMERS OR USERS OF BUYER'S PRODUCTS.**

II. HOW TO OBTAIN WARRANTY SERVICE

Product covered under this warranty shall only be accepted from and returned to Buyer's designated repair center. Buyer's dealers, distributors, agents, and end users cannot submit items to Telular under this warranty. To receive warranty service an RMA number must first be obtained from Telular Technical Support. The defective or non-compliant Product should be sent by Buyer freight pre-paid to: Telular Corporation, 647 North Lakeview Parkway, Vernon Hills, IL 60061, USA or other designated location. The product must be packaged in the original carton and packing material or an equivalent package and must have the assigned RMA number clearly marked on the carton. Returned Product received without an RMA number will be returned to the sender.

III. WARRANTY CONDITIONS:

This is the complete warranty for the Products manufactured by Telular and sold to Buyer. Telular assumes no obligation or liability for additions or modifications to this warranty unless made in writing and signed by an officer of Telular. Unless made in separate written agreement between Telular and Buyer, Telular does not warrant the installation, field maintenance or service of the Products or parts.

TELULAR CANNOT BE RESPONSIBLE IN ANY WAY FOR ANY ANCILLARY EQUIPMENT NOT FURNISHED BY TELULAR WHICH IS ATTACHED TO OR USED IN CONNECTION WITH THE PRODUCTS OR FOR OPERATION OF THE PRODUCTS WITH ANY ANCILLARY EQUIPMENT AND ALL SUCH EQUIPMENT IS EXPRESSLY EXCLUDED FROM THIS WARRANTY. FURTHERMORE, TELULAR CANNOT BE RESPONSIBLE FOR ANY DAMAGE TO THE PRODUCTS RESULTING FROM THE USE OF ANCILLARY EQUIPMENT NOT FURNISHED BY TELULAR FOR USE WITH THE PRODUCTS.

WHEN THE PRODUCT IS USED IN CONJUNCTION WITH ANCILLARY OR PERIPHERAL EQUIPMENT NOT MANUFACTURED BY TELULAR, TELULAR DOES NOT WARRANT THE OPERATION OF THE PRODUCT/PERIPHERAL COMBINATION, AND TELULAR SHALL HONOR NO WARRANTY CLAIM WHERE THE PRODUCT IS USED IN SUCH A COMBINATION AND IT IS DETERMINED BY TELULAR THAT THERE IS NO FAULT WITH THE PRODUCT. TELULAR DISCLAIMS LIABILITY FOR RANGE, COVERAGE, AVAILABILITY, OR OPERATION OF THE CELLULAR SYSTEM WHICH IS PROVIDED BY THE CARRIER.

IV. WHAT THIS WARRANTY DOES NOT COVER:

(a) Subsequent upgrades and enhancements to the Product. (b) Defects, non-compliance or damage resulting from use of the Product in other than its normal and customary manner or environment. (c) Defects, noncompliance or damage from misuse, lightening, accident or neglect. (d) Defects, noncompliance or damage from improper testing, operation, maintenance, installation, adjustment, or any alteration or modification of any kind. (e) Product disassembled or repaired in such a manner as to adversely affect performance or prevent adequate inspection and testing to verify any warranty claim. (f) Product which has had the serial number removed or made illegible. (g) Defects, non-compliance or damage due to spills of food or liquid. (h) All plastic surfaces and all other externally exposed parts that are scratched or damaged due to cus-

tomers normal use. (i) Costs and expenses, including without limitation handling, labor and transportation, incurred in returning Product for warranty service to Telular's Repair Center. (j) Repair, programming or servicing by someone other than Telular.

V. GENERAL PROVISIONS:

THIS WARRANTY IS GIVEN IN LIEU OF ALL OTHER EXPRESS OR STATUTORY WARRANTIES. IMPLIED WARRANTIES, INCLUDING WITHOUT LIMITATION IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, TITLE, INFRINGEMENT, DELIVERY, NEGLIGENCE AND PERSONAL INJURY, ARE DISCLAIMED. FURTHER, AS THE CELLULAR CARRIER IS NOT CONTROLLED BY TELULAR, NO WARRANTY IS MADE AS TO COVERAGE, AVAILABILITY OR GRADE OF SERVICE PROVIDED BY THE CELLULAR CARRIER. IN NO EVENT SHALL TELULAR BE LIABLE FOR DAMAGES IN EXCESS OF THE PURCHASE PRICE OF THE PRODUCT, FOR ANY LOSS OF USE, LOSS OF TIME, INCONVENIENCE, COMMERCIAL LOSS, LOST PROFITS OR SAVINGS OR OTHER INCIDENTAL, SPECIAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OR INABILITY TO USE SUCH PRODUCT TO THE FULL EXTENT SUCH MAY BE DISCLAIMED BY LAW. SOME JURISDICTIONS DO NOT ALLOW THE EXCLUSION OR LIMITATIONS OF INCIDENTAL OR CONSEQUENTIAL DAMAGES OR LIMITATION ON HOW LONG AN IMPLIED WARRANTY LASTS.

VI. SOFTWARE PROVISIONS:

Laws in the United States and other countries preserve for Telular certain exclusive rights for copyrighted Telular software such as the exclusive rights to reproduce in copies and distribute copies of such Telular software. Telular software may be copied into, used in and redistributed with only the Product associated with such Telular software. No other use, including without limitation, disassembly of such Telular software or exercise of exclusive rights in such Telular software is permitted and Telular reserves all rights not expressly granted in this Limited Commercial Warranty.

Patents:

Telular Corporation products are protected and manufactured under one or more of the following U.S. patents and related international patents and patents pending relating thereto: 4,658,096; 4,737,975; 4,775,997; 4,868,519; 4,922,517; 5,134,651; 5,361,297; 5,469,494; 5,046,085; 5,715,296.

Trademarks:

Telular Corporation owns the following registered trademarks: TELULAR and design, TELULAR, CELJACK, MAXJACK, TELCEL, HEXAGON LOGO, PHONECELL, CELSERV, TELGUARD, CPX, and AXCELL.

Preliminary

Preliminary



647 North Lakeview Parkway
Vernon Hills, Illinois 60061, USA
Tel: 847-247-9400 • Fax: 847-247-0021
E-mail: support@telular.com
<http://www.telular.com>