



Preliminary



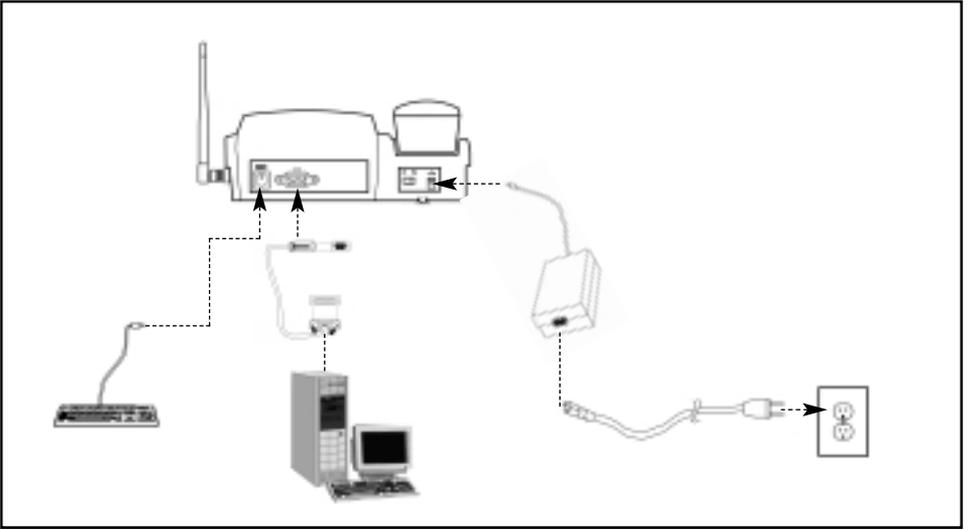
PHONECELL[®] SX5D GSM

- **Fixed Wireless Phone**
- **Fixed Wireless Fax Phone**
- **Fixed Wireless LCR Phone**

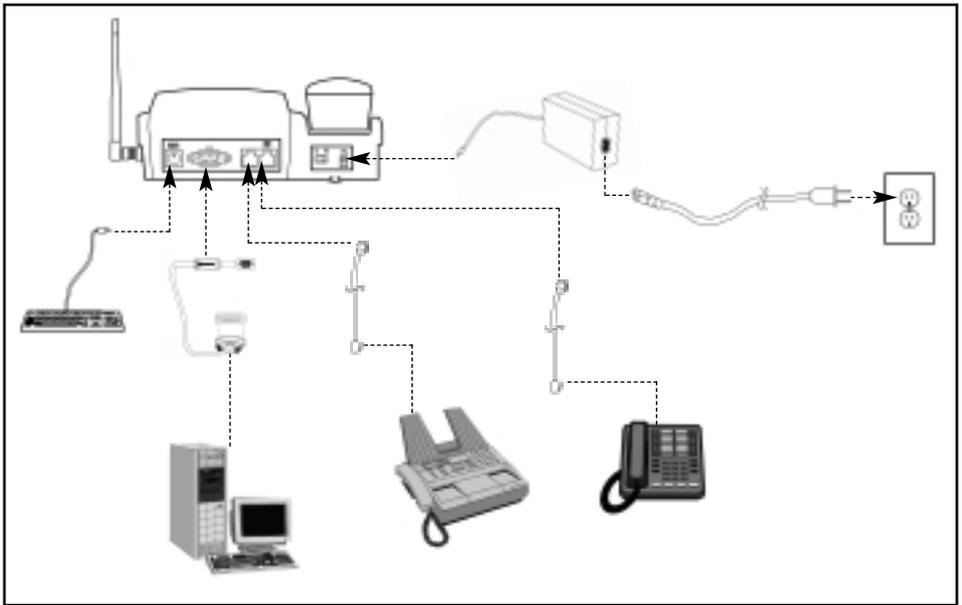
**900/1800 MHz GSM (DUAL BAND)
1900 MHz GSM**

TECHNICAL MANUAL

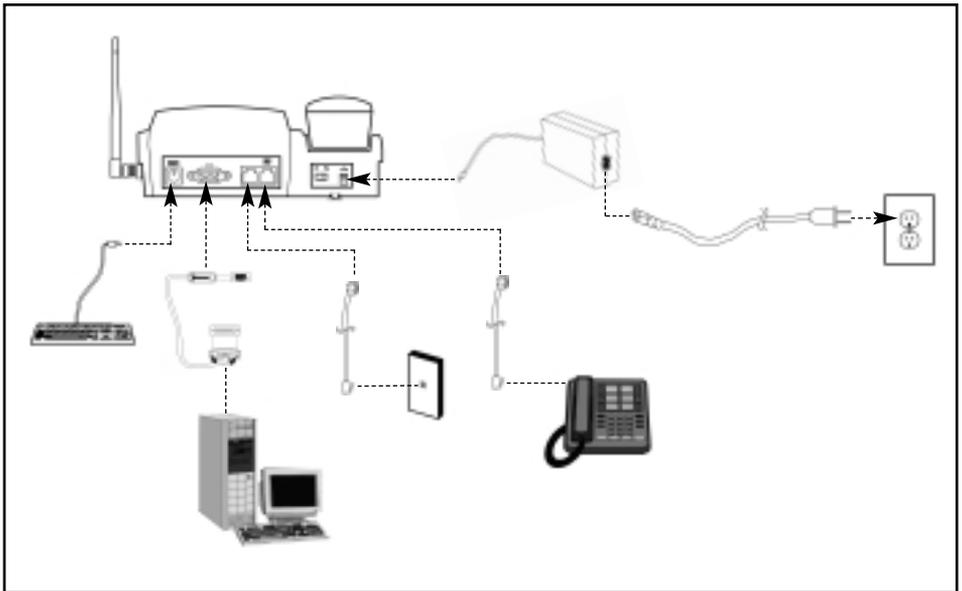
QUICK CONNECTION GUIDE



Fixed Wireless Phone



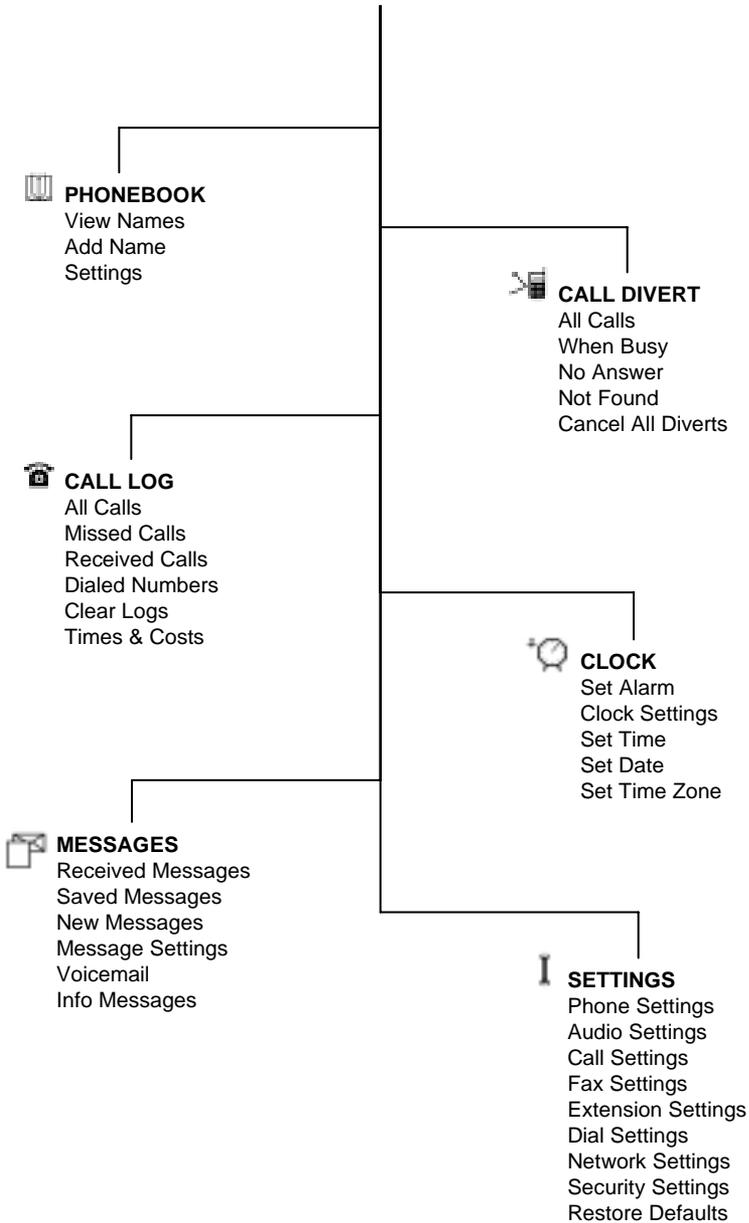
Fixed Wireless FAX Phone



Fixed Wireless Personal Least Cost Routing (LCR) Phone

SX5D MENU STRUCTURE

MAIN MENU



CONTENTS



Phonocell® SX5D GSM Desktop Phone

Spike Antenna

Power Supply

AC Power Cord

Before installing your **Phonocell® SX5D**, 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

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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: mainoffice@telular.com · <http://www.telular.com>

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SETUP

SIM Card Installation

The SX5D requires a Subscriber Identification Module (SIM) for normal operation. The service provider supplies the SIM card, which carries the account information needed to operate the SX5D. The SIM compartment is on the back of the SX5D.

NOTE: If you don't have a SIM card, contact your network service provider.

- 1) Remove the power supply if you have already connected it. You must remove the power supply whenever you install or remove a SIM Card.
- 2) Remove the SIM compartment cover by removing the screw - *see Figure 1*.
- 3) Open the SIM compartment holder.
- 4) Line up the SIM card with the arrow on the SIM card holder - *see Figure 2*.
- 5) Gently insert the SIM card in the slot of the SIM card holder.
- 6) Close the SIM card holder.

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

- 7) Reattach the SIM compartment cover with the screw.

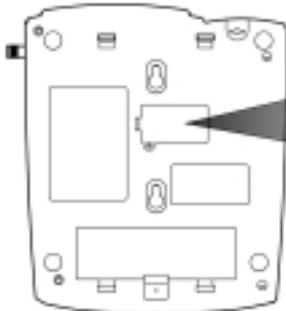


Figure 1 - SIM compartment cover.

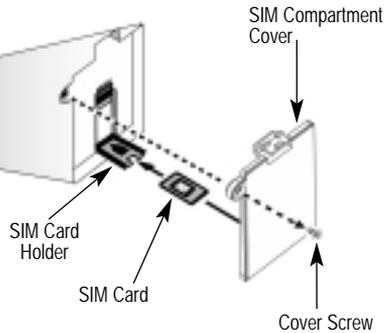


Figure 2 - SIM card installation.

Emergency Batteries

Install Batteries

- 1) Remove the battery access door screw located on the bottom of the unit - *see Figure 3*.
- 2) Press the battery access door tabs and remove the battery access door.
- 3) Install 4 AA batteries.
- 4) Reinstall the battery access door using the screw - *see Figure 4*.

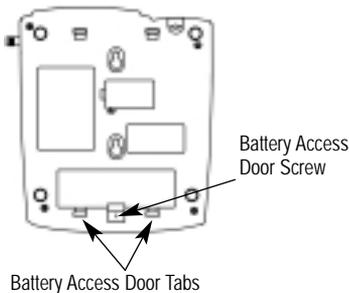


Figure 3 - Battery access door.

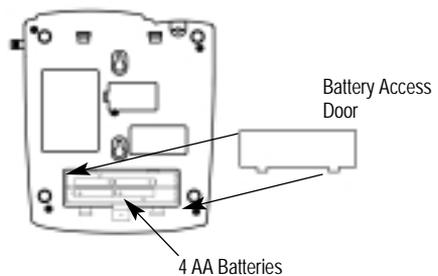


Figure 4 - Battery installation.

Battery Operation

The unit will not automatically switch from AC to battery upon loss of AC power. You must manually change the AC/Battery switch to battery operation. Battery power will provide up to two hours of talk time and 72 hours of standby.

SX5D Location and Setup

The SX5D comes with a standard spike antenna (TNC).

- 1) Select a location that is above ground and as close to windows (or exterior walls) as possible to get the best signal - **see Figure 5**.
- 2) Attach and finger-tighten the antenna; do not over-tighten - **see Figure 6**.



Figure 5 - Attach the antenna.

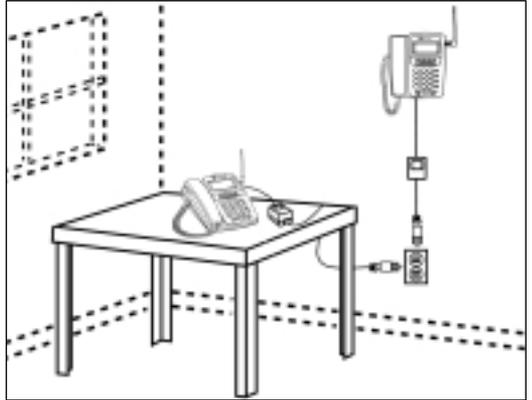


Figure 6 - SX5D location.

Connect the Handset

Before you can use the SX5D, you must connect the handset cable.

- 1) Connect the handset cable to the phone jack - **see Figure 7**.
- 2) Connect the handset cable to the handset.

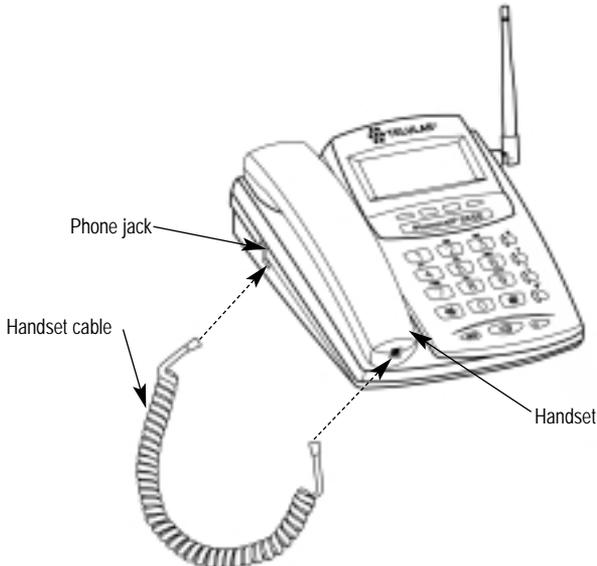


Figure 7 - SX5D handset connection.

Optional Wedge

The wedge is used to position the SX5D for easy viewing of the LCD and keypad for wall mounting and desktop mounting - see **Figures 8 and 9**.

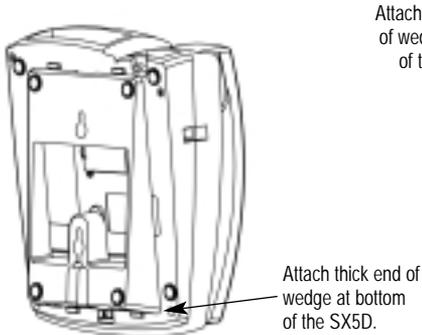


Figure 8 - Wedge attached for wall mounting.

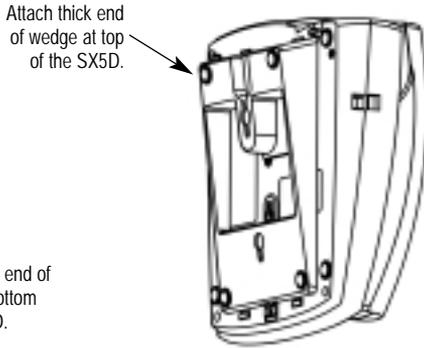


Figure 9 - Wedge attached for desk mounting.

Attach the Optional Wedge

- 1) Slide the wedge tabs on one end of the wedge into the top wedge tab slots - see **Figure 10**.
- 2) Snap the wedge tabs on the other end of the wedge into the bottom wedge tab slots - see **Figure 11**.

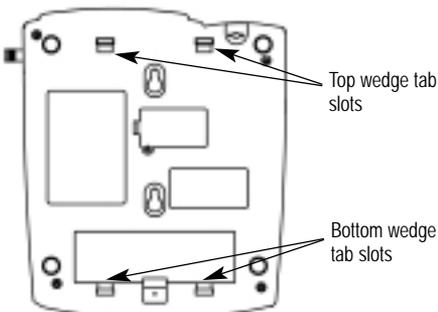


Figure 10 - Wedge tab slots.

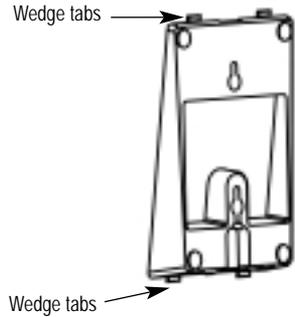


Figure 11 - Wedge tabs.

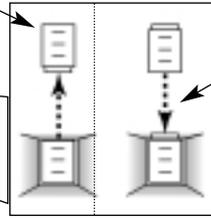
Wall-Mounting

- 1) Remove the mounting clip from the cradle and re-insert it with the tab pointing up - **see Figures 12 and 13.**

Mounting Clip in Cradle (tab up)



Remove Mounting Clip from the Cradle (tab down)



Insert Mounting Clip into the Cradle (tab up)

Figure 12 – Handset mounting clip assembly.

Figure 13 – Handset mounting clip for wall-mount.

- 2) Mark two hole locations 83 mm (3-1/4 inches) vertically apart and drill two holes into the wall.
- 3) 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.
- 4) Align the mounting holes with the screws and mount the SX5D onto the screws - **see Figures 14 and 15.**

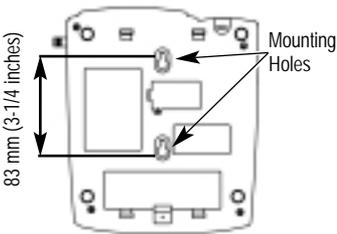


Figure 14 – SX5D mounting hooks.

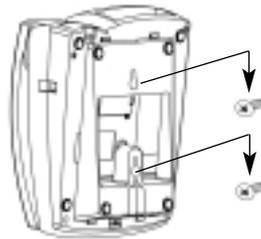


Figure 15 – Mount the SX5D onto the screws.

Connect the SX5D to AC Power

- 1) Connect the barrel connector of the power supply to the AC power input on the rear panel of the SX5D - *see Figure 16*.
- 2) Plug the AC power cord into the power supply.
- 3) Plug the AC power cord into the wall socket. The SX5D will power up automatically.
- 4) Check the cellular signal strength and move the unit until you achieve the best signal possible - see the *Service Indication* section of this manual.

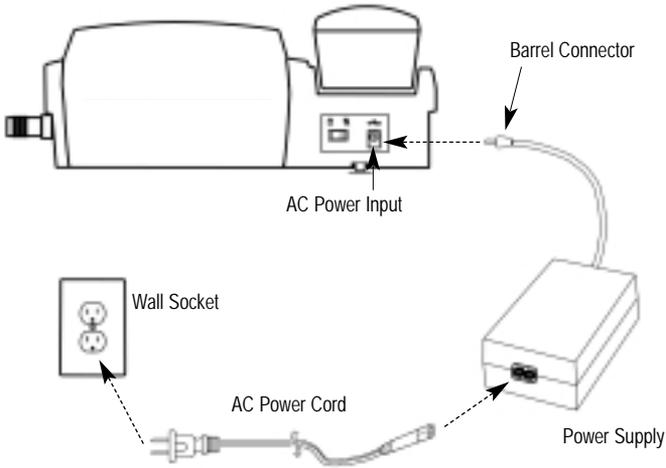


Figure 16 – SX5D AC power connection.

GETTING TO KNOW YOUR SX5D

Function Keys

Operation of the SX5D is accomplished through the function keys on the keypad of the unit - see **Figure 17**.

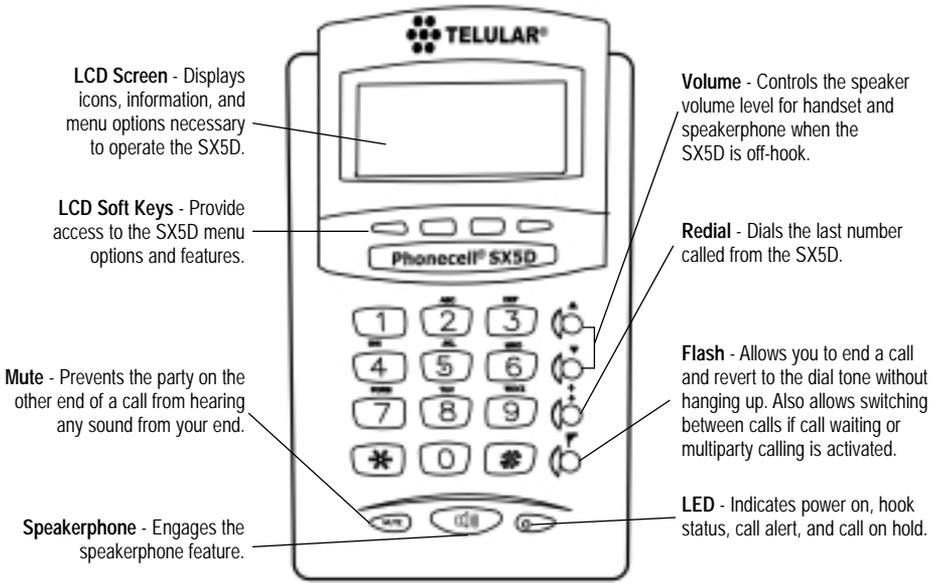


Figure 17 – SX5D keypad and function keys.

LCD Display Icons

Icons displayed on the LCD display indicate the features in use, the status of the phone, signal strength and battery status - see **Figure 18**.

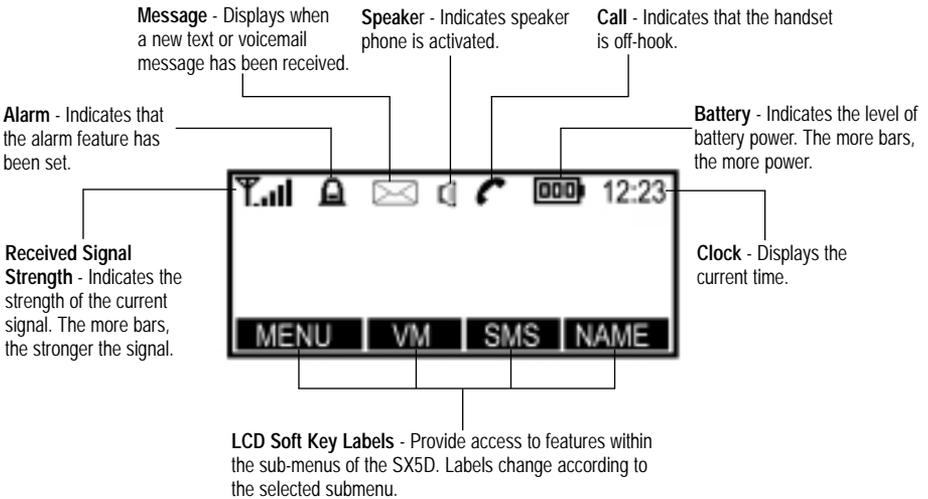


Figure 18 – SX5D LCD display icons.

Service Indication

Full Service

When the power cord is connected properly, the SX5D will display the Telular logo, emit a power-on tone, and the LED will light up. After a few seconds, the greeting and mobile number will display. If service is available, the antenna icon will display indicator lines to display the signal strength.

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.

Limited Service

If there is a signal, but full service with the system is blocked, only emergency calls will be allowed. Contact your service provider for more information.

Network Registration

If the home network is unavailable, but there is another network available (either another frequency or system), the SX5D will attempt to register to that system. If there is more than one system, a list of available systems will display.

- 1) Use the arrow keys to highlight a network from the list.
- 2) Press **SELECT**. If the selected network cannot be accessed, the list of available networks will be updated and you will have to select a different one.



Full Service.



No Service.

CALL FUNCTIONS

Making Calls

- 1) Pick up the handset or press the **SPEAKERPHONE** key. The SX5D 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 **CLEAR** key once.
- To erase all digits, press and hold down the **CLEAR** key until all digits are erased.

Redial the Last Telephone Number Dialed

- 1) Pick up the handset. The SX5D is now “off-hook.”
- 2) Press the **REDIAL** key.



Making Calls.

Receiving Calls

When there is an incoming call, the SX5D rings, an incoming call notification displays and blinks, and the LED blinks.

- 1) Pick up the handset or press the **Speakerphone** key.
- 2) Begin talking.

NOTE: Press the **REJECT** key to refuse the call. The phone will stop ringing and the calling party will be disconnected.

Receive a Call When Caller ID is Activated

The Caller ID feature displays the caller's number when the SX5D rings. If the caller's name and number are stored together in the SX5D phonebook, the caller's name and number will be displayed. Contact your service provider to activate this feature.

NOTE: If there is a missed call (call is not answered), “MISSED CALLS” will be displayed.



Receive a Call When Caller ID is Activated.

Ending Calls

Hang up the phone (place the handset back onto the SX5D cradle).

NOTE: If the call is ended by the other party, the SX5D will clear the line and re-establish a dial tone. The SX5D may be used for another call or may be hung up.

In-Call Functions

Mute a Call

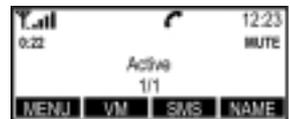
- 1) While in a call, press the **MUTE** key. A notification will display in the upper right corner of the LCD.
- 2) Press the MUTE button again to un-mute the microphone.

Place a Call on Hold

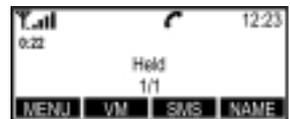
- 1) While in a call, press the **MENU** key.
- 2) Select *Hold*. The display will change from Active to Held.
- 3) To reactivate the call, press the **MENU** key, then select *Retrieve*.

Adjust Volume

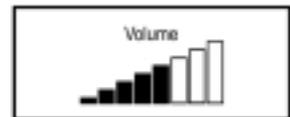
- 1) While in a call, press the **UP/Down** Volume Keys to raise or lower the handset/speakerphone volume.



Mute a Call.



Place a Call on Hold.



Adjust Volume.

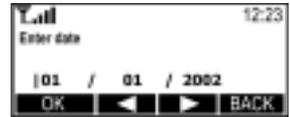
SX5D BASIC FEATURES

Date and Time Settings

The SX5D allows customization of the date, time, time zone, and time format (12 or 24 hour).

Set the Date

- 1) Press the **MENU** key.
- 2) Select *Clock*, then *Clock Settings*.
- 3) Scroll to *Date Format*. The current format will display.
- 4) Press the **CHANGE** key.
- 5) Select the desired date format.
- 6) Press **OK**, then press the **BACK** key to return to the Clock menu.
- 7) Scroll to *Set Date*, then press the **CHANGE** key.
- 8) Enter the desired date.
- 9) Press **OK**.



Set the Date.

Set the Time

- 1) Press the **Menu** key.
- 2) Select *Clock*, then select *Clock Settings*.
- 3) Scroll to *Time Format*. The current format will display.
- 4) Press the **CHANGE** key.
- 5) Select the desired time format (12 hour or 24 hour).
- 6) Press **OK**, then press the **BACK** key to return to the Clock menu.
- 7) Select *Set Time*.
- 8) Enter the desired time.
- 9) Press **OK**.



Set the Time.

Set the Time Zone

- 1) Press the **Menu** key.
- 2) Select *Clock*, then scroll to *Set Time Zone*.
- 3) Press the **CHANGE** key. Use the two middle soft keys to scroll left or right on the graphic to highlight the time zone you are in.
- 4) Press the far left soft key to select the highlighted time zone.

Audio Settings

Adjust Alert Volume (Ringer)

- 1) Press the **MENU** key.
- 2) Select *Settings*, then *Audio Settings*.
- 3) Select *Alert Volume*, then set the desired volume level.



Adjust Alert Volume.

Adjust Alert Tones (Ringer)

Alert tones can be customized for different types of calls, such as voice or text.

- 1) Press the **MENU** key.
- 2) Select *Settings*, then *Audio Settings*.
- 3) Use the arrow keys to scroll through the alert types.
- 4) Select the alert to be changed.
- 5) Select the desired alert sound.



Adjust Alert Tones.

NOTE: If *Off* is selected, no alert will sound.

Turn On/Off the Keypad Tones

- 1) Press the **MENU** key.
- 2) Select *Settings*, then select *Audio Settings*.
- 3) Select *Keypad Tones*.
- 4) Select *On* or *Off*.

Turn On/Off the Warning Tones

- 1) Press the **MENU** key.
- 2) Select *Settings*, then select *Audio Settings*.
- 3) Select *Warning Tones*.
- 4) Select *On* or *Off*.

Speakerphone

- 1) Press the **Speakerphone** key. The dial tone will be heard through the speaker and the Speaker icon will display.
- 2) Enter the telephone number.

Phonebook

The SX5D has an Internal Phonebook which stores up to 99 telephone numbers with corresponding names.

Adjust Phonebook Settings

Entries can be saved to the SIM card or to the phone memory. When numbers are saved to the SIM card, they can be transferred by removing the SIM card and installing it in another GSM phone.

- 1) Press the **MENU** key.
- 2) Select *Phonebook*, then select *Settings*.
- 3) Select *Save Entries To*.
- 4) Select the desired location of the phonebook entries.

Use Keypad Buttons

There are three or four letters assigned to each number on the telephone keypad. The letters on the keypad will display when pressed. If you press the number 3, for example, a "D" will appear. If you press it twice, you will see the "E", and if you press it three times, the "F" will appear. The cursor will move on to the next space after a brief pause, so you must select the letter quickly.

Enter a Hard Pause

Hard pauses allow the SX5D to be used with a automated phone systems used for pagers or automated banking. When a number is programmed into the phonebook, a pause is entered by pressing and holding "#" for more than one second. The hard pause will be displayed as "P."

Add a New Entry to the Phonebook

- 1) Press the **MENU** key.
- 2) Select *Phonebook*, then select *Add Name*.
- 3) Enter a name by pressing the alphanumeric keys (maximum 16 numbers).

NOTE: To correct errors in the name, press the CLEAR key.

- 4) Press **OK**.
- 5) Enter the desired telephone number (maximum of 30 digits).
- 6) Press **OK**. You will be prompted to enter another number.
- 7) Press **OK** to save the entry and return to the Phonebook menu. If you have additional numbers (up to 2 more) follow steps 5 through 7 for each number.



Turn On/Off the Keypad Tones.



Speakerphone off-hook.



Adjust Settings.



Add a New Entry to the Phonebook.

Search for a Number in Memory

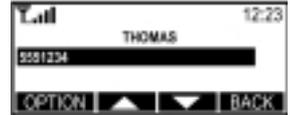
- 1) Press the **NAME** key.
- 2) Use the arrow keys to scroll through the entries, or use the keypad to view all entries that begin with a specific letter.
NOTE: The list will be in order of the most recently selected entries if viewed using the arrow keys.
- 3) Press the **SELECT** key to view the phone number(s) listed for a highlighted entry.

Edit or Delete and Entry

- 1) Press the **NAME** key.
- 2) Use the arrow keys to scroll through the entries, or use the keypad to view all entries that begin with a specific letter.

NOTE: The list will be in order of the most recently selected entries if viewed using the arrow keys.

- 3) Press the **SELECT** key to view the phone number(s) listed for an entry that is highlighted.
- 4) Press the **OPTIONS** key and select the desired option.



Edit or Delete and Entry.

Speed Dialing

Speed dialing permits one-touch dialing for up to 10 telephone numbers stored in the internal phone book.

Assign a Number to a Speed Dial Location

- 1) Press the **NAME** key.
- 2) Select the desired entry to add to the speed dial list.
- 3) Press the **OPTIONS** key.
- 4) Select *Add to Speed Dial*.
- 5) Select the location (0 - 9).

NOTE: The next available location will display automatically. To select a specific location, press the desired number on the keypad. If that location is already in use, the phone number that is stored there can be replaced with a new one.

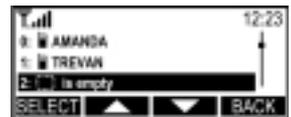
Dial a Speed Dial Location

- 1) Pick up the handset or press the **Speakerphone** key.
- 2) Press and hold the number of the location containing the number to be called.
- 3) The number is displayed and dials automatically.

NOTE: The SX5D will automatically go off-hook in speakerphone mode when a number is pressed and held for at least 1 second.

View the Speed Dial List

- 1) Press the **MENU** key.
- 2) Select *Phonebook*, then select *Settings*.
- 3) Select *Speed Dial List*.



View the Speed Dial List.

SX5D ADDITIONAL FEATURES

Call Logs

The SX5D stores the telephone numbers of the last ten outgoing calls and the last ten incoming calls with the dates and times of the calls. These numbers are displayed and can be dialed directly from the call log.

View the Call Log

- 1) Press the **MENU** key.
- 2) Select *Call Log*.
- 3) Select the desired calls to view (All, Missed, Received, Dialed). Calls are denoted by the following icons:



View Logs.



View All Calls.

Dial a Number From the Call Log

- 1) Press the **MENU** key.
- 2) Select Call Log.
- 3) Highlight the desired call to dial.
- 4) Pick up the handset or press the **Speakerphone** key.
- 5) A dial tone will sound, then the number will be dialed.

NOTE: This feature will not work for unavailable or private calls (denoted as Withheld in the Log).

Clear the Call Log

- 1) Press the **MENU** key.
- 2) Select *Call Log*, then select *Clear Logs*.
- 3) Select *Yes* to clear the call log. Select *No* to return to the Call Log menu.



Clear the Call Log.

Check the Last Call Time

- 1) Press the **MENU** key.
- 2) Select *Call Log*, then select *Times & Costs*.
- 3) Select *Last Call Time*.



Check the Last Call Time.

Check Total Accumulated Air Time

- 1) Press the **MENU** key.
- 2) Select *Call Log*, then select *Times & Costs*.
- 3) Select *All Calls Time*.



CheckTotal Accumulated Air Time.

Reset Accumulated Air Time

- 1) Press the **MENU** key.
- 2) Select *Call Log*, then select *Times & Costs*.
- 3) Select *Clear Meters*.



Reset Accumulated Air Time.

Alarm Settings

Alarm time and tone can be set for daily use or for one time only.

Set Alarm Time and Tone

- 1) Press the **MENU** key.
- 2) Select *Clock*, then select *Set Alarm*.
- 3) Select *Set Time*, then enter the desired alarm time.
- 4) Press **OK**.
- 5) Select *Set Tone*, then select the desired alarm tone.
- 6) Press **OK**.



Set Alarm Time and Tone.

Set Alarm to Repeat Daily

- 1) Press the **MENU** key.
- 2) Select *Clock*, then select *Set Alarm*.
- 3) Select *Repeat Daily*.



Set Alarm to Repeat Daily.

Turn Alarm On/Off

- 1) Press the **MENU** key.
- 2) Select *Clock*, then select *Set Alarm*.
- 3) Select *Alarm Status*.
- 4) Select *On* or *Off*.
- 5) Press **OK**.



Turn Alarm On/Off.

Personalization Options

The SX5D can be customized with a personal greeting. The Greeting Message displays when the SX5D is turned on.

Display Your Telephone Number

- 1) Press the **MENU** key.
- 2) Select *Settings*, then select *Phone Settings*.
- 3) Select *My Number*.
- 4) Press the **EDIT** key.
- 5) Enter your phone number.
- 6) Press **OK**.



Display Your Own Telephone Number.

Change Greeting Message

- 1) Press the **MENU** key.
- 2) Select *Settings*, then select *Phone Settings*.
- 3) Select *Set Greeting*.
- 4) Enter the desired greeting message.
- 5) Press **OK**.



Change Greeting Message.

Change the Display Screen Contrast

- 1) Press the **MENU** key.
- 2) Select *Settings*, then select *Phone Settings*.
- 3) Select *Screen Contrast*.
- 4) Use the arrow keys to adjust the display contrast.
- 5) Press **OK**.



Change the Display Screen Contrast.

Network Settings

Network Selection

- 1) Press **MENU**.
- 2) Select *Settings*, then select *Network Settings*.
- 3) Select *Select Network*.
- 4) Select either *Automatic* or *Manual*.

NOTE: Automatic will select a network based on the Preferred Networks settings. Manual will display a list of available networks from which one must be selected manually.

Preferred Networks

Insert New Entry

- 1) Press **MENU**.
- 2) Select *Settings*, then select *Network Settings*.
- 3) Select *Select Network*.
- 4) Select *Set Preferred*.
- 5) Highlight the entry above which the new preferred carrier is to be inserted.
- 6) Press **SELECT**.
- 7) Select *Insert*.
- 8) Select an entry from the list.



Searching for Network.

New entry will be inserted here. →



Insert New Entry.

Delete Entry

- 1) Press **MENU**.
- 2) Select *Settings*, then select *Network Settings*.
- 3) Select *Select Network*.
- 4) Select *Set Preferred*.
- 5) Select the desired entry to delete.
- 6) Select *Delete*.



Delete Entry.

Add New Network

- 1) Press **MENU**.
- 2) Select *Settings*, then select *Network Settings*.
- 3) Select *Add New Network*.
- 4) Select *Add*.
- 5) Enter the correct Country Code, Network Code, and Network Name as prompted. New networks will be added to the end of the list.



Add New Network.

Edit or Delete an Added Network

Network information can be edited or deleted.

- 1) Press **MENU**.
- 2) Select *Settings*, then select *Network Settings*.

--NEED ADDITIONAL INFORMATION--

Change Network Password

- 1) Press **MENU**.
- 2) Select *Settings*, then select *Network Settings*.
- 3) Select *Change Network Password*.
- 4) --NEED ADDITIONAL INFORMATION--

SIM PIN Setup

SIM PIN1 controls access to SIM Card information. When SIM PIN1 is on, it must be entered each time the SX5D is turned on. When off it requires entry only when the SIM Card is put into a phone. Another user could still access the phone with a different SIM Card. To lock the phone even when a new SIM Card is inserted, see the *How to Lock the Phone* section of this manual. SIM PIN2 accesses network-controlled features.

Turn On/Off SIM PIN1

- 1) Press the **MENU** key.
- 2) Select *Settings*, then select *Security Settings*.
- 3) Select *SIM PIN1*.
- 4) Select *On* or *Off*.



Turn On/Off SIM PIN1.

Change SIM PIN2

- 1) Press the **MENU** key.
- 2) Select *Settings*, then select *Security Settings*.
- 3) Select *SIM PIN2*.
- 4) Select *Change PIN*. You will be prompted to enter the old PIN.
- 5) Enter the old PIN.
- 6) Enter the new PIN. It must be numerical and be between 4 and 8 digits long.
- 7) Press **OK** to save the new PIN, or use the **CLEAR** key to make changes.



Change SIM PIN2.

Call Barring

Use of the SX5D can be restricted by barring certain types of calls from being made or received.

Incoming Call Barring

The SX5D can bar all incoming calls and it supports network call barring of all incoming calls or all incoming calls when the SX5D is abroad (outside the home network country). Network call barring also allows the barring of calls from specific types of services, such as voice or data.

Bar All Incoming Calls, via the SX5D Handset

- 1) Press the **MENU** key.
- 2) Select *Settings*, then select *Security Settings*.
- 3) Select *Handset Call Barring*.
- 4) Select *Bar Incoming*, then select *On*. Select *Off* to cancel the bar.



Bar All Incoming Calls, via the SX5D Handset.

Bar All Incoming Calls, via the Network

- 1) Press the **MENU** key.
- 2) Select *Settings*, then select *Security Settings*.
- 3) Select *Network Call Barring*.
- 4) Select *Bar Incoming*.
- 5) Select the desired service to bar.
- 6) Select *On*. Select *Off* to cancel the bar.
- 7) **-NEED MORE INFORMATION-**



Bar All Incoming Calls via the Network.

Bar Incoming Calls if Abroad, via the Network

- 1) Press the **MENU** key.
- 2) Select *Settings*, then select *Security Settings*.
- 3) Select *Network Call Barring*.
- 4) Select *Bar Incoming if Abroad*.
- 5) Select the desired service to bar.
- 6) Select *On*. Select *Off* to cancel the bar.
- 7) **-NEED MORE INFORMATION-**



Bar Incoming Calls if Abroad, via the Network.

Outgoing Call Barring

The SX5D can bar outgoing calls, or outgoing calls to a specific prefix, and it supports the following types of network call bars of outgoing calls:

- Foreign Calls: Does not allow international calls.
- Only local and home country: Only allows local and home country calls.
- Outgoing: Does not allow any calls to be made.
- All: Does not allow any calls to be made or received.
- Cancel all: Deactivates any network call bars that are currently active.

Bar All Outgoing Calls, via the SX5D Handset

- 1) Press the **MENU** key.
- 2) Select *Settings*, then select *Security Settings*.
- 3) Select *Handset Call Barring*.
- 4) Select *Bar Outgoing*, then select *All*.



Bar All Outgoing Calls, via the Handset.

Bar Outgoing Calls to Specific Prefixes, via the SX5D Handset

- 1) Press the **MENU** key.
- 2) Select *Settings*, then select *Security Settings*.
- 3) Select *Handset Call Barring*.
- 4) Select *Bar Outgoing*, then select *List*.
- 5) Select *Add* to add prefixes to be barred.

NOTE: If there are no prefixes in the list, *Add* is the only option. After prefixes have been added to the list, *Edit* and *Delete* options will display.

- 6) Enter the new prefix to be barred.
- 7) Select **OK**.



Bar Outgoing Calls to Specific Prefixes, via the Handset.

Bar Outgoing Calls, via the Network

- 1) Press the **MENU** key.
- 2) Select *Settings*, then select *Security Settings*.
- 3) Select *Network Call Barring*.
- 4) Select the desired type of network call bar to activate (see list above for descriptions of each type).
- 5) Select the desired service to bar.
- 6) Select *On*.
- 7) **-NEED MORE INFORMATION-**



Bar Outgoing Calls, via the Network.

All Call Barring

The SX5D supports network call barring of all incoming or outgoing calls.

Bar All Calls, via the Network

- 1) Press the **MENU** key.
- 2) Select *Settings*, then select *Security Settings*.
- 3) Select *Network Call Barring*.
- 4) Select the *Bar All*. Select *Cancel All* to cancel all network call bars that have been activated.



Bar All Calls, via the Network.

Restricted Dialing

Outgoing calls can be restricted by creating a Fixed Dialing list to allow only numbers on that list to be dialed from the SX5D.

Add to the Fixed Dialing List

- 1) Press the **MENU** key.
- 2) Select *Settings*, then select *Security Settings*.
- 3) Select *Fixed Dialing*.
- 4) Select *Edit Dial List*.
- 5) Enter SIM PIN 2, then press **OK**.
- 6) To add a new entry, select *Add*, enter the new number, then press **OK**.



Add to or Edit the Fixed Dialing List.

Edit the Fixed Dialing List

- 1) Press the **MENU** key.
- 2) Select *Settings*, then select *Security Settings*.
- 3) Select *Fixed Dialing*.
- 4) Select *Edit Dial List*.
- 5) Enter SIM PIN 2, then press **OK**.
- 6) Use the arrow keys to highlight the desired entry to edit.
- 7) Press the **OPTIONS** key.
- 8) Select *Edit* to change the entry. Select *Delete* to erase the entry.

Activate Fixed Dialing

- 1) Press the **MENU** key.
- 2) Select *Settings*, then select *Security Settings*.
- 3) Select *Fixed Dialing*.
- 4) Select *On*.
- 5) Enter SIM PIN 2, then press **OK**.



Activate Fixed Dialing.

Dial Delay

The Dial Delay is the amount of time, after a digit is dialed, the SX5D waits before automatically sending the call.

- 1) Press the **MENU** key.
- 2) Select *Settings*, then select *Dial Settings*.
- 3) Select *Dial Delay*.
- 4) Enter the desired delay time time (in seconds).
- 5) Press **OK**.



Dial Delay.

Auto Dial

The SX5D is able to recognize frequently called numbers and automatically dial them without waiting for the Dial Delay. Once a number has been called twice successfully it will Auto Dial when this option is turned on.

- 1) Press the **MENU** key.
- 2) Select *Settings*, then select *Dial Settings*.
- 3) Select *Auto Dial*.
- 4) Select *On* to enable Auto Dial.



Auto Dial.

In-Call DTMF

In-Call DTMF allows the SX5D to access automated telephone systems, such as on-line banking systems, where users must select options by dialing digits.

- 1) Press the **MENU** key.
- 2) Select *Dial Settings*, then select *Dial Settings*.
- 3) Select In-Call DTMF.
- 4) To enable In-Call DTMF, select *In Band* or *Out of Band*. To disable DTMF, select *None*.
- 5) Press **OK**.



In-Call DTMF.

Phone Security

The SX5D can be locked to restrict access. When the phone is locked, no keypad buttons will function until the lock code is entered. To receive incoming calls when the SX5D is locked, enter the lock code when the phone rings.

NOTE: Turning the phone off or inserting a new SIM Card will not disable this feature.

Lock the Phone

- 1) Press the **MENU** key.
- 2) Select *Settings*, then select *Security Settings*.
- 3) Select *Handset Lock PIN*.
- 4) Select *On*.



Lock the Phone.

Unlock the Phone

- 1) Press the **MENU** key.
- 2) Select *Settings*, then select *Security Settings*.
- 3) Select *Handset Lock PIN*.
- 4) Select *Off*.



Unlock the Phone.

Change the Lock Code

The lock code is preset at the factory to "0000." The lock code can be changed to any 4-digit code.

- 1) Press the **MENU** key.
- 2) Select *Settings*, then select *Security Settings*.
- 3) Select *Handset Lock PIN*.
- 4) Select *Change PIN*.
- 5) Enter the new lock code.



Change the Lock Code.

NOTE: The new lock code must be four numeric digits.

Restore Factory Defaults

All system features can be reset to the factory defaults.

- 1) Press the **MENU** key.
- 2) Select *Settings*, then select *Restore Defaults*.
- 3) Select *Yes* to restore all factory default settings.



Restore Factory Defaults

SUPPLEMENTARY SERVICES (NETWORK DEPENDENT)

Call Divert (Forwarding)

Call Divert sends incoming calls to another telephone number, even when the SX5D is turned off. Call Divert options include all calls, calls that come in when the line is busy, calls that are not answered after a specified number of rings, or calls that come in when the SX5D is powered off or has lost the network signal (*Not Found*). Certain types of calls can be diverted, such as voice, data, fax, or text messages. Contact your service provider to activate Call Divert.

Turn On Call Divert

- 1) Press the **MENU** key.
- 2) Select *Call Divert*.
- 3) Select the desired criteria to use for diverting calls (*All Calls, When Busy, No Answer, Not Found*).
- 4) Select *On*.
- 5) To specify which types of calls to divert, select *By Service*.

NOTE: If no services are specified, the SX5D will automatically divert calls of all types.

- 6) Highlight the desired service to divert, then press **SELECT**. The default is *All Services*.



Call Divert (Forwarding).

Call Waiting

Call Waiting enables notification of incoming calls when the SX5D is off-hook (whether during a call or during dialing). To respond to Call Waiting, press the Flash key or the hook switch. Contact your service provider to activate Call Waiting.

Turn On Call Waiting

- 1) Press the **MENU** key.
- 2) Select *Settings*.
- 3) Select *Call Settings*.
- 4) Select *Call Waiting*.
- 5) Select *On*.



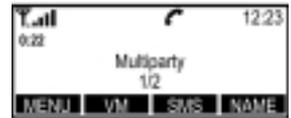
Call Waiting.

Multiparty Calling

Multiparty Calling allows connection to multiple calls simultaneously. Contact your service provider to activate Multiparty Calling.

Engage a Multiparty Call

- 1) While in a call, put the call on hold (via a hookflash or the menu).
- 2) Dial a second number, then press the **Flash** key to connect it.
- 3) When the second call is answered, press the **MENU** key and select *Multiparty*.
- 5) Select the desired option.



Engage a Multiparty call.

Join All: Join the active call with the held multiparty call.

Hold All: Place multiparty call on hold.

Next: Display the next call party in a multiparty call.

Transfer: Connects one call party to another call party and allows the user to leave the call.

Exclude: Place the selected party of a multiparty call on hold.

Private: Hold a private call with one party in a multiparty call. Other parties are put on hold.

I am busy: User defined user busy (UDUB) indicates BUSY to a waiting caller.

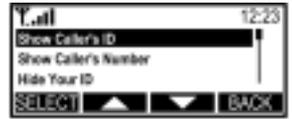
End All: End active and held calls.

NOTE: Options are available depending on the status of the call or calls. For example, if only one other person is in the call, only the End All option will display, or if all the calls, have been joined, the Join All option will not display.

Caller ID Settings

Caller ID settings allow personalization of how caller's information is presented and how your information is presented when you call someone who has caller ID capability.

- 1) Press the MENU key.
- 2) Select *Settings*, then select *Call Settings*.
- 3) Select Caller ID, then select the desired options.



Caller ID Settings.

Voicemail

The VM key will blink and the envelope icon will display when there are new voicemail messages. Contact your service provider to activate voicemail.

Set Voicemail Access Numbers

Typically, your service provider will set the voicemail access numbers for you. If they do not, contact them for the Home Mailbox and Roam Mailbox numbers.

- 1) Press the **MENU** key.
- 2) Select *Messages*, then select *Voicemail*.
- 3) Select *Voicemail Settings*, then select *Box Numbers*.
- 4) Select *Home Mailbox*, then enter the corresponding number you received from your service provider.
- 5) Press **OK**.
- 6) Select *Roam Mailbox*, then enter the corresponding number you received from your service provider.
- 7) Press **OK**.



Set Voicemail Access Numbers.

Check Voicemail

- 1) Press the **VM** key. You will be connected to your voicemail system automatically.
- 2) Follow the the automated instructions.

NOTE: Each service provider may have its own automated instructions.

Turn Voicemail On/Off

- 1) Press the **MENU** key.
- 2) Select *Messages*, then select *Voicemail*.
- 3) Select *Set Voicemail*, then select *On* or *Off*.



Turn Voicemail On/Off.

Change Voicemail Alert Type

New voicemail notification is sent by your service provider via an audio notification or a SMS text message.

- 1) Press the **MENU** key.
- 2) Select *Messages*, then select *Voicemail*.
- 3) Select *Voicemail Settings*.
- 4) To be alerted by a SMS indication, select *Alert by Message*.
- 5) Call your phone number and leave a voicemail message. The network will send an SMS text message to the SX5D.
- 6) View the SMS message you receive from the network and write down the text.
- 7) Follow steps 1-3 above to return to Voicemail Settings.
- 8) Select *Alert Match*.
- 9) Enter the text that you copied from the SMS message. This text will display on the SX5D LCD whenever a new voicemail message is received.



Change Voicemail Alert Type.

NOTE: If you do not specify the Alert match text, or if you enter incorrect text for the Alert match, the SMS message will not display when you receive new voicemail.

Short Message Service (SMS)

The SX5D is capable of sending and receiving SMS text messages. Each SMS message can have a maximum of 160 characters. Upon receipt of a new SMS message, the message icon (envelope) will be displayed and the SMS key will blink. A maximum of 10 messages can be stored. Contact your service provider to activate SMS.

SMS messages can be generated using the SX5D keypad or a standard computer keyboard. See the *Quick Connection Guide* at the front of this manual to see how to connect a keyboard.

Read Text Messages

- 1) Press the **SMS** key.
- 2) Select *Received Messages*.
- 3) Scroll to the desired message.
- 4) Press the **READ** key.

NOTE: Unread messages are denoted by a closed envelope icon. Messages that have been read are denoted by an open envelope icon.

Reply to Received Messages

- 1) View the desired message.
- 2) Press the **OPTIONS** key.
- 3) Select *Text Reply* to reply with a text message. Select *Voice Reply* to reply with a voicemail.
- 4) For a text reply, type your reply message, then press **OK**. Selecting *Voice Reply* will activate the speakerphone and call the person who sent the message.

Forward Text Messages

- 1) View the desired message.
- 2) Press the **OPTIONS** key.
- 3) Select *Forward*.
- 4) Enter the desired number, or press the **NAME** key to select a phonebook entry.
- 5) Press **OK**.
- 6) Select *Send Now*.

Delete Text Messages

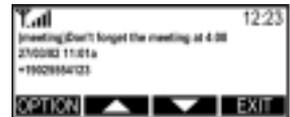
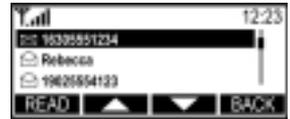
- 1) View the desired message.
- 2) Press the **OPTIONS** key.
- 3) Select *Delete*.

Create Text Messages

- 1) Press the **SMS** key.
- 2) Select *New Message*.
- 3) Enter the message text.

NOTE: Use the ***** key on the keypad to change the type of text (all capital letters - ABC, lower case letters - abc, or numbers - 123). The current text type is displayed under the clock in the upper right corner of the display screen.

- 4) Press **OK**.
- 5) Enter the desired number, or press the **NAME** key to select a phonebook entry.
- 6) Press **OK**.
- 7) To send the message, select *Send Now*. To save it to send at a later time, select *Send Later*.



Read Text Messages.



Reply to Received Messages.



Forward Text Messages.



Delete Text Messages.



Create Text Messages.

View Saved Messages

- 1) Press the **SMS** key.
- 2) Select *Saved Messages*.
- 3) Select the desired message.

Send Saved Messages

- 1) Press the **SMS** key.
- 2) Select *Saved Messages*.
- 3) View the desired message.
- 4) Press the **OPTIONS** key.
- 5) Select *Forward*.
- 6) Enter the desired number or press the **NAME** key to select a phonebook entry.
- 7) Press **OK**.
- 8) Select *Send Now*.

Message Settings

Message Lifetime

Message lifetime is the amount of time that an unread message will stay on the network server before being removed.

- 1) Press the **SMS** key.
- 2) Select *Message Settings*.
- 3) Select *Message Lifetime*.
- 4) Select the desired time for unread messages to remain on the network server.
- 5) Press **OK**.

Message Format

This allows messages to be sent in different formats. Change this setting before sending a message to send it in the desired format. Contact your service provider for information about which message formats are supported.

- 1) Press the **SMS** key.
- 2) Select *Message Settings*.
- 3) Select *Message Format*.
- 4) Select the desired format in which to send messages.
- 5) Press **OK**.



View Saved Messages.



Send Saved Messages.



Message Lifetime.



Message Format.

Information Messages

Information messages provide information such as phone numbers for taxi services, car rentals, or emergency services. If your service provider offers information messages, you can select the subjects to view and choose the language in which to view it.

Set Information Subjects

- 1) Press the **MENU** key.
- 2) Select *Messages*, then select *Info messages*.
- 3) Select *Settings*, then select *Subject*.
- 4) Select *Active*.
- 5) Press the **SELECT** key.
- 5) Select *Add*.
- 6) Select the desired subject from the list.



Set Information Subjects.

Set Languages

- 1) Press the **MENU** key.
- 2) Select *Messages*, then select *Info messages*.
- 3) Select *Settings*, then select *Set languages*.
- 4) Select the desired language from the list.

In-Call Options

The following options are available during a call. While in a call, press the **MENU** key to access these options.

Hold: Puts active call on hold.

Retrieve: Activates a call that is on hold.

Swap: Swaps between held call and active call.

End & Next: Releases active call and answers waiting call.

End Current: Ends the currently displayed call.

Multiparty: Displays options for managing multiparty calls.

Main Menu: Allows access to the Phonebook, Messages, or Call Log features.

NOTE: Some options display depending on the current call status. For example, if there are no calls on hold, the Retrieve or Swap options will not display.

DIGITAL DATA SERVICE

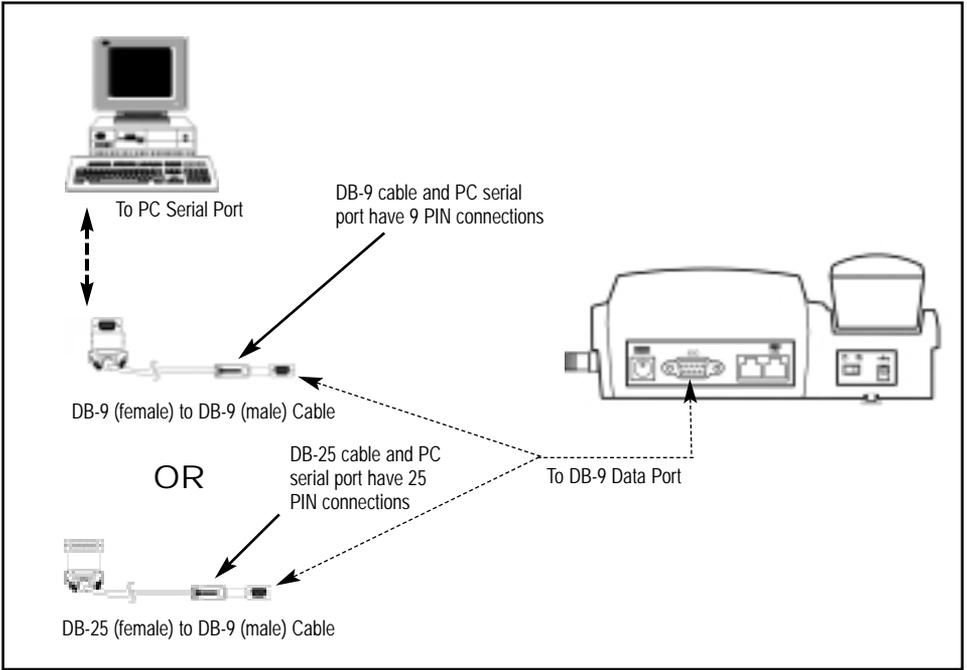


Figure - PC Data Connection.

Standard Modem Setting

The SX5D features a DB-9 digital computer fax/data port for connection to a personal computer (PC) - not supplied. When connected to a PC, the SX5D's PC interface is capable of sending and receiving digital fax transmissions, sending and receiving e-mail communications, and browsing the Internet (Data speeds may vary depending upon your cellular network).

PC Data Connection

A data cable - *not included* - is required for data transmission. To determine the necessary cable, count the number of PIN connections in the serial port of your PC (see below). If there are 9 PIN connections in the PC serial port, a DB-9 (female) to DB-9 (male) cable is required. If there are 25 PIN connections in the PC serial port, a DB-25 (female) to DB-9 (male) cable is required - **see Figure - .**

For specific digital fax/data setup procedures, **see Appendix A - Setup PC Serial Port for Phonicell Digital Fax/Data.**

Sending and Receiving Digital Fax

Your computer needs a standard 19,200 bps modem and a commercial PC fax emulator (Winfax, Netfax, etc.), To send a fax, no special settings are required. The computer will change the SX5D mode setting automatically and reset it to voice mode after sending a fax. To receive a fax, you must change the SX5D from voice to fax mode.

- 1) Set up a standard 19,200 bps modem.
- 2) Install a commercial PC fax emulator (Winfax, Netfax, etc.).

PERSONAL LEAST COST ROUTING (LCR) OPTION

The SX5D Personal LCR option allows calls to be placed through the wireless GSM network or the public switched telephone network (PSTN) - *see Figure 20*. This capability enables users to take advantage of favorable rates based on type of call (local or long distance), time of call, and receiving party (wireless subscriber or PSTN subscriber).



Figure 20 - Personal LCR option.

Connect SX5D to the Landline PSTN

- 1) Connect the PSTN wall jack to the unmarked jack on the SX5D (RJ-11 cable not provided) - *see Figure 21*.

Connect Additional Phones to SX5D

Any additional phones (extensions) attached to the SX5D will only be able to access the GSM network. No calls can be made or received via the PSTN on the extension phones.

- 1) Connect a standard telephone to the jack on the SX5D that is marked with a telephone icon - *see Figure 21*.

NOTE: Be sure to connect to the appropriate RJ-11 jacks, because improper connections could cause damage your SX5D.

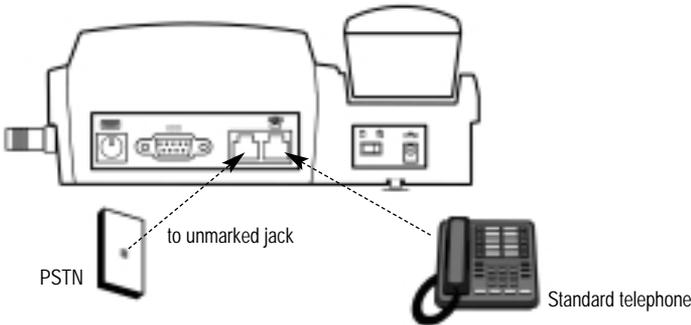


Figure 21 - Connect SX5D to the Landline PSTN and to additional phones.

Connecting a Rotary Phone to the SX5D

If a rotary phone is connected to the SX5D, the Dial Settings must be set to Pulse. For push-button (DTMF) phones, do **not** turn the Pulse Dialing option on.

- 1) Press the **MENU** key.
- 2) Select *Settings*, then select *Dial Settings*.
- 3) Select *Pulse Dialing*, then select *On*.

Set the LCR Default

The SX5D is set (at the factory) for primary service through the GSM network and secondary service through the PSTN network. The SX5D can be modified so that primary service is through the PSTN. A prefix must be entered to access the secondary service.

- 1) Press the **MENU** key.
- 2) Select *Settings*, then select *Extension Settings*.
- 3) To set the primary service to the PSTN, select *Internal*. To set the primary service to the GSM wireless network, select *External*.
- 4) To set a prefix for accessing the secondary service, select *Prefix*.
- 5) Enter up to two digits for the desired prefix. The factory default prefix is “#.”
- 6) Press **OK**.



Set the LCR Default.

Make Calls via the Secondary Service

- 1) Pick up the handset.
- 2) Dial the prefix.
- 3) Dial the desired number.

ANALOG FAX OPTION

The Analog Fax option allows connection of a fax machine and additional telephones to the SX5D. The SX5D can be set up to use one or both of its RJ-11 jacks. In Single Jack mode, only the jack designated with a telephone icon is operational. A fax machine or an additional telephone can be connected to that jack, but to receive faxes a fax machine must be connected. In Dual Jack mode, the unmarked jack is used for fax, and the jack marked with the telephone icon is used for any additional phones.

Analog Fax Setup

- 1) Press the **MENU** key.
- 2) Select *Settings*, then select *Fax Settings*.
- 3) Select *RJ-11*.
- 4) Select the desired mode (*Single Jack* or *Dual Jack*). The default is Dual Jack.

Connect SX5D for Dual Jack Mode

- 1) Connect a fax machine to the unmarked phone jack on the SX5D - *see Figure 22*.
- 2) Connect a regular phone to the phone jack that is marked with a telephone icon.

Connect SX5D for Single Jack Mode

- 1) Connect a fax machine to the phone jack on the SX5D that is marked with a telephone icon - *see Figure 23*.

NOTE: In single jack mode, the SX5D default is for voice calls, so a fax by-pass must be entered to send faxes. After a fax is sent, the SX5D will automatically reset itself for voice calls.

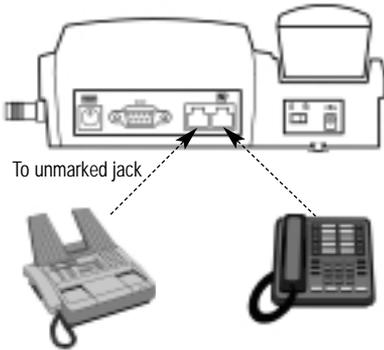


Figure 22 - Connect the SX5D for dual jack mode.

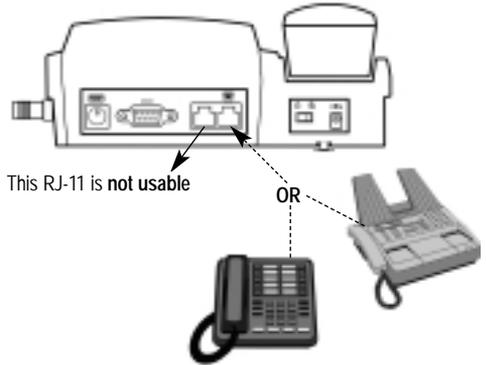


Figure 23 - Connect the SX5D for single jack mode.

Set SX5D for Digital Fax

- 1) Press the **MENU** key.
- 2) Select *Settings*, then select *Fax Settings*.
- 3) Select *Serial Port*.

NOTE: The SX5D must be connected to a computer, or other device that is set up for digital data, via the serial connector in order to send or receive digital faxes.

TECHNICIAN COMMANDS

The following options are to be used by trained field technicians to set up the Phonicell® SX5D for operation in the network. To prevent casual access to these options, which can directly affect the proper operation of the unit, these options are protected by a Service PIN.

To Access the Service menu, press the MENU key, select Settings, then select Service Settings. You will be prompted to enter the Service PIN before you can access any Service menu items. Each option is described below, along with the available settings and the system defaults

Service Settings

Mobile Equipment Personalization (MEP) Locks: The five locks available are SIM, Network, Network Subset, Provider, and Corporate. With the correct password, you can activate, deactivate, disable, or check the status of any MEP lock. Once a lock is disabled, it cannot be reactivated.

Dial Tone Type: This dial tone will be the air interface (GSM) dial tone presented to the user on the desk phone and any POTS phones connected to the SX5D. The available options are 425 Hz and Dual Frequency (default).

Audio In: Changes the input impedance. Options are 600 Ohms (default) or 900 Ohms.

Supervision Pulse: Changes the pulse that is generated when the far end answers a call originated from the SX5D. Options are 12 kHz (default), 16 kHz., Off, Pulse Duration, and Pulse Level.

Pulse Duration options include any value between 10 and 65535 milliseconds.

Pulse Level options listed by dB ranges (default is -3dB).

Line Reversal: Enables line reversal on tip and ring for incoming calls.

Line Reversal (MO) can be turned On or Off (default).

Line Reversal (MT) can be turned On or Off (default).

Line Ringing: Controls the line ringer.

Frequency options are 20 Hz (default), 25 Hz, or 50Hz.

Cadence options range from .1 to 25.5 seconds (by 100 millisecond increments).

Disconnect Pulse: Sets pulse value. Options range from 10 to 65535 milliseconds.

Dial Tone After Disconnect: Determines if a dial tone is heard after far end disconnect. If On, then dial tone will start at some time after a far end disconnect is detected as long as the user is still off hook (The default setting is Off).

Receiver Off Hook (ROH) Setup: Sets the parameters of the ROH tone that is heard when the SX5 goes off hook for an extended period of time without making a call. Options are Continuous or Non-continuous, Set Start Time, and Set Stop Time.

Self Test Interval: Sets the reset interval for periodic resetting or sanity checking. The range is 0 to 65536 minutes, where 0 means that there is no resetting.

SERVICE PIN: Options are On (default) or Off, and Change PIN. If the Service PIN is entered wrong three consecutive times, you will be returned to the Main Menu.

RF: Displays the quality and signal level of the received signal (for evaluation of SX5D placement, etc). The display will show a dB level for received signal strength and/or a decimal value representing the signal quality (BER, FER, etc.). The signal strength will be on row 2 and the signal quality value will be on row 3.

Restore Service DEFAULTS: Resets all service items to factory defaults separately from the user settings.

SAFETY INFORMATION

Your Phonecell® SX5 Desktop Phone functions as both a radio transmitter and receiver. When it is ON, the SX5D receives and sends out radio frequency (RF) energy. The GSM 800 unit operates in the frequency range between 824 and 894 MHz, and the GSM 1900 between 1850 MHz and 1990 MHz. Both employ commonly used phase/frequency modulation techniques. When you use your Phonecell® SX5, the cellular system handling your call controls the power level at which your 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 Phonecell® 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 Phonecell® 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 Environment

Operating Temperature: From -20°C to +60°C ; Up to 95% relative humidity (non-condensing).

Storage Temperature: From -25°C to +75°C; Up to 95% relative humidity (non-condensing).

Antenna Care and Replacement

Do not use the Phonecell® 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 Phonecell® 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 Phonecell® 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 Phonecell® 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 Phonecell® 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 Phonecell® SX5 OFF when in a "blasting area" or in areas posted: "Turn off two-way radio."

Potentially Explosive Atmospheres

Turn your Phonecell® SX5 OFF when in any area with a potentially explosive atmosphere. It is rare, but your Phonecell® 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 Phonecell® 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.

FCC Part 15 Class B Compliance

This Phonecell® 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.

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, non-compliance 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 customer 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:

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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.

APPENDIX A:

SETUP PC SERIAL PORTS FOR PHONECELL DIGITAL FAX/DATA

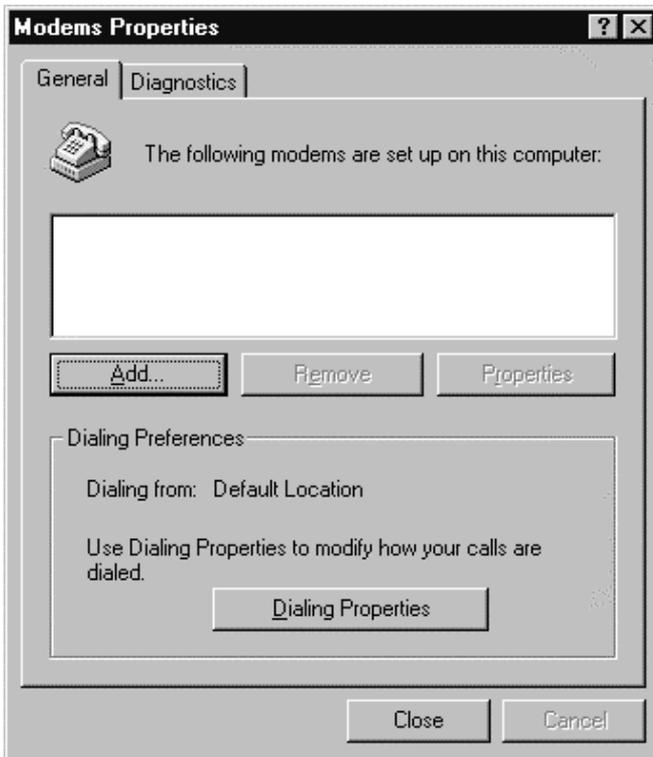
Requirements

- GSM account with your network service provider including a Data/Fax facility.
- PC/Laptop/ Notebook with Com Port.
- Windows 95/98

NOTE: When all of the above have been satisfied, you may proceed.

Modem Setup

- 1) Power on your PC/laptop and start Windows 95/98.
- 2) Using the PC pointing device, press the "START" button, select "SETTINGS" and then "CONTROL PANEL." Once the Control Panel window appears double click the MODEMS icon button. The modem properties window will appear.



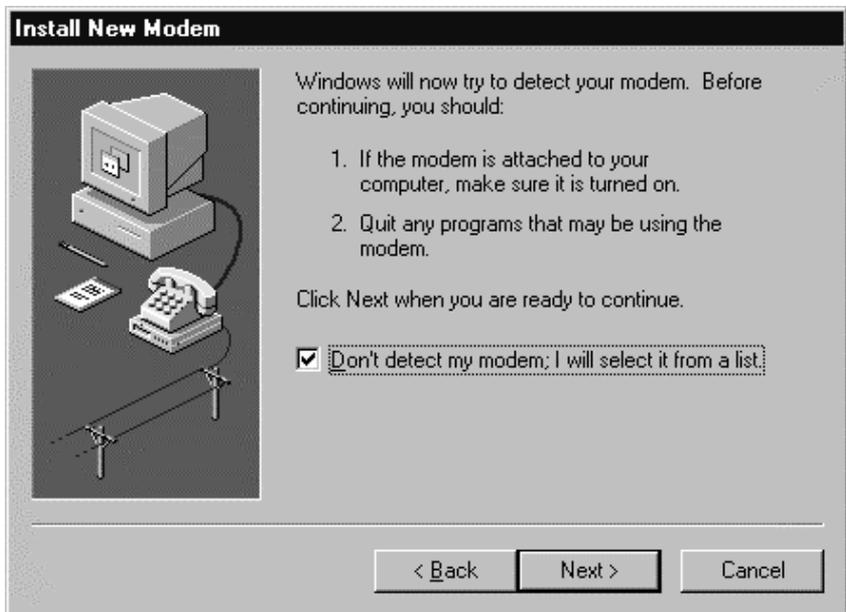
NOTE: A data card modem device may appear in the list of installed modems.

- 3) Click the ADD button to install a new modem device for the Phonecell® SX5.

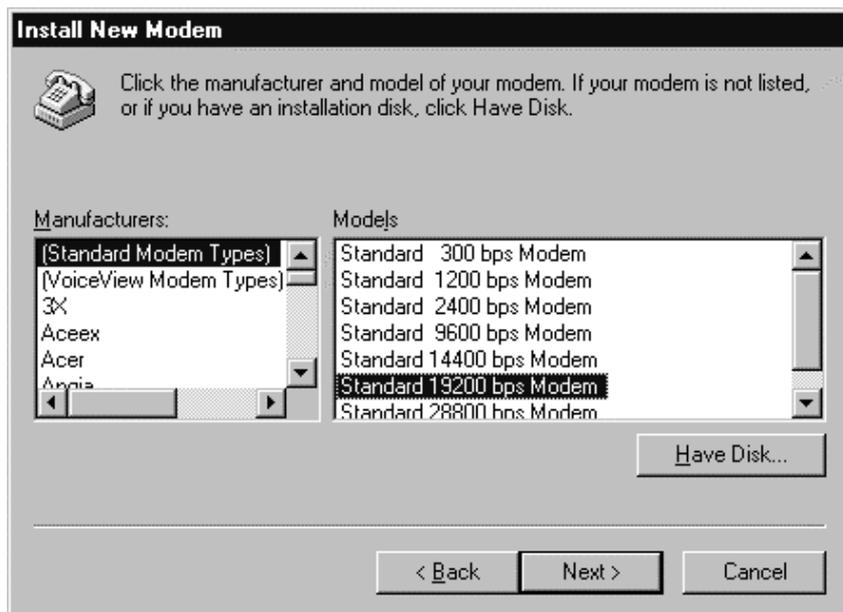
- 4) The install new modem window may appear asking for the type of modem to install. Click on "Other" followed by clicking the NEXT button. If this window does not appear, go to Step 5.



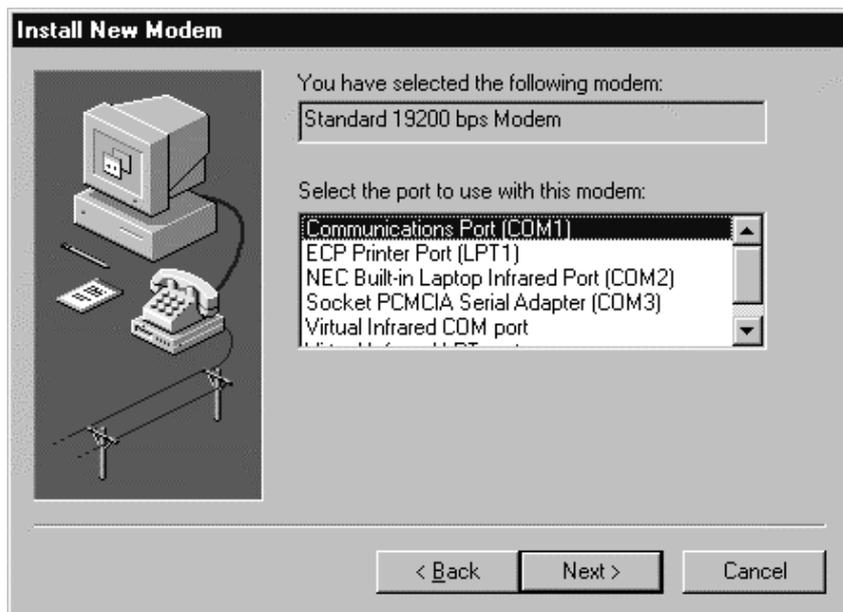
- 5) The install new modem window will appear. Then, click on the "Don't detect my modem option" followed by clicking the NEXT button.



- 6) The install new modem will update again to select the manufacturer and modem model. Click on "Standard Modem Types" from the manufactures list followed by "Standard 19200 bps Modem" from the model list. Then click on the NEXT button.



- 7) The install new modem will update to select the com port. Click on the available serial port and then click on the "Next" button. Windows 95 will create a modem configuration file for the Phonecell® SX5. This may take several minutes.



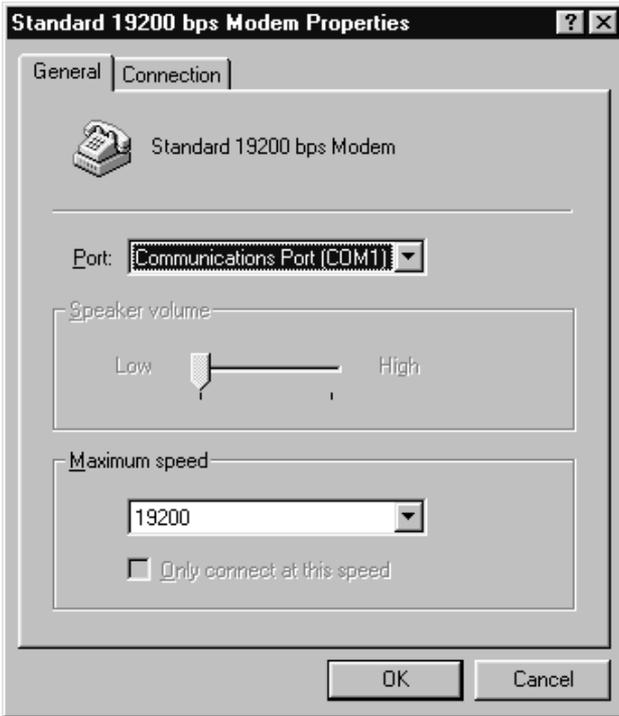
- 8) The Install New Modem window will update again. Click on Finish to proceed.



- 9) The Modems Properties window should appear. Click on the Properties button.



- 10) The Standard 19200 bps Modem Properties window will open in the General tab. Set as shown with the com port you have selected.



- 11) Click on the Connection tab. Set as shown below.



- 12) Click on the Advanced button. Set as shown.
- 13) Click on OK and Close to back out of each window. Your modem is now set up.

