SXT-2180 CDMA 1XRTT FIXED WIRELESS TERMINAL 800 MHz CDMA



TECHNICAL MANUAL

VOICE COMMUNICATION and PCO/PTB Application







Before installing your **SXT-2180**, carefully remove the contents from the shipping carton and check for evidence of shipping damage. **If damage is found, contact your Authorized Sungil Distributor or shipping agent immediately**.

SAFE OPERATION INSTRUCTIONS

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

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

IMPORTANT NOTICES

TERMS AND CONDITIONS FOR USE OF SXT-2180 PRODUCTS ("Product")

These Terms and Conditions are a legal contract between you and SUNGIL 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.

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Emergency Battery Backup Checking the Battery

Each Subscriber SXT2180 unit comes with a standard internal battery inside, and can be replaced at your local After-Service Centers.



Plug in Your Telephone

- 1) Locate the modular line port on your telephone and plug in one end of a standard phone cord
- 2) Connect the other end of the phone cord to the telephone port on the side of the Unit.

NOTE: The SXT-2180 does not support direct computer modem (data) operation through the phone port or fax port.

SXT-2180 OPERATION

Use the LED Status Indicators

- 1) Power-on the unit
- 2) The LEDs indicator on the front of the will turn ON. The following table describes the modes and operations of the indicator.

Status LED

#. √: Don't care

			LED				
	Section		RSSI		BATT		Description
			Color	Blink	Color	Blink	
1	Power O	N	Green	Χ	None	Χ	
2	Boot sec	uence	Yellow	Χ	Yellow	0	Booting
3	Initialize	done	Red	0	Red	Χ	Idle status
4	Activation	n fail	Yellow/Red	0	\checkmark	V	MIN/ESN fail, etc
5	5 Exception occur		Yellow	X	Red	Х	
6		High	Green	X	$\sqrt{}$	V	RSSI < 98dB
7	RSSI	Normal	Yellow	Χ	\checkmark	V	98< RSSI < 104dB
8	Kooi	Low	Red	Χ	\checkmark	V	RSSI > 104dB
9		No signal	Red	0	\checkmark	V	Searching
10		High		$\sqrt{}$	Green	Χ	Over 3.8V
11		Normal	$\sqrt{}$	$\sqrt{}$	Yellow	Χ	Over 3.7V
12	Battery	Low		$\sqrt{}$	Red	Χ	Over 3.4V
13	Dattery	Low battery warn	$\sqrt{}$	V	Red	0	Under 3.4V
14		Switch off		$\sqrt{}$	Yellow/Red	0	
15		No battery		√	None	Χ	

Battery Strength Indicator

Low battery Tone – Generated alert sound or blink power LED when low battery. In conversation generated alert sound, not in conversation blink power LED.

Basic Operation

Placing a Call

1) Pick up the handset and listen for a dial tone. 2) Dial the phone number.

Receiving a Call

When your telephone rings, pick up the handset and begin talking.

NOTE: If you hear an incoming call while picking up the handset, you can receive the call by hanging up (placing the handset on the cradle) immediately. This will cause the phone to start ringing.

Ending a Call

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

Important Tones and Alerts

Normal Dial Tone - When cellular service is available, the receiver emits a standard (steady) dial tone.

No Service Tone - A fast beeping tone indicates that no cellular service is available. At that time, you can check the RSSI status. The LED of RSSI will be blink with red color.

Outgoing Call Restriction - A slower beeping is an indication that calls may be received, but not made, from this particular phone.

I . Entering User Menu

- Pick up the handset
- Press Entry code: '##XX' ('XX' is 2 digit code) Now you entered User Menu. Ex) '01' – SIO '02' – Emergency etc
- Select sub menu and input user data.

User Menu Table	
0. Hidden Menu	01. Emergency
	02. HOT Line
	03. Mirroring
	04. A Key
	05. Mater Clear
	06. Test Call
1. Ring / Sound	1. Ring Type
-	2. Volume
	3. DTMF
	4. 1Min Alert
	5. Svc Alert
2.Tools	1. Caller ID
	2. Dial Tone
3. Time	1. Alarm
	2. Auto Send Time
	3. Flash Time
	4. On Hook Time
 Activating 	1. New Code
	Outgoing Restrict
	3. Reset Phone
	4. Voice Privacy
	5. Auto Gain Control

II. Hidden Menu

Note: User MUST input the security lock code when accessing below menu options.

'##01**'**

- In the Emergency Menu state, you can store 3-address.
- Press 1~3 key to select an address slot, and then wait until you have heard a security tone. It likes as short melody.
- Enter the security lock code, and press desired Emergency Number and then press '*' to save.
- If you press '#' to release.

Ex) '##011911*' - Store number '911' to 1st Emergency Slot.

HOT Line

'##02'

- In the Hotline Menu state, you can store 1 address.
- To set up the hotline, you should follow two steps
 - 1. Set a hotline number which will be dialed automatically whenever you pick up the handset.
 - 2. Set a hotline time to delay between picking up handset and dialing a hotline number.
- After heard confirmation tone for a lock code, You can set a Hotline number.
- And then press * to store it in a memory for preserving it on power-on/off cycle.
- If you press '#' instead of ★, it will be released.
- And then if you stored a hotline number by pressing*, you should select hotline delay time from 1sec. to 9sec. Just press one key from 1 to 9 please.
- And then press * to store your selection.
- If you didn't select the delay time, it will be set up default time on 2sec.

Ex) ##02 → enter lock code → 39533447 + * + confirm tone → 4 + *

- This example shows you a hotline number was saved with the number are "39533447" and delayed time is 4 secs.

Mirroring

'##03'

- In the Mirroring menu, you can backup or restore a data of system configuration.
- When you heard a security tone, press the security lock code.
- After then, you can select backup or restore. Press '* to backup, and '#' to restore. During 'backup' process, the terminal will be reset automatically.

##03 → enter lock code → * − Performs backing up system values
##03 → enter lock code → '#' − Performs restoring system values

'##04'

- A Key - In the A Key menu, you can make sure that whether A key is valid or not.
- Input 26 digits of the A key what you want to valid.
- After finished input, press '*'.
- If the A key was valid, you can hear confirmation tone, but otherwise, you can hear an alert tone.

##04 → 26 digits (20 digits + 6 digits checksum) → *

Master Clear

'##05'

- In the Master clear mode, you can reset all setting value in Terminal.
- When it was done, the Terminal is set to Factory initiate.

NOTE: It will be erased all user data like as alarm, dial tone, etc.

Ex)

##05 → * (Master Clear)

Test Call (will	be used in a lab like CDG2)	'##06'				
- In the Test call	mode, you can.					
1	NEW 8K MARKOV	6	SO55 LOOP BACK			
2	NEW 13K MARKOV					
3	8K LOOP BACK					
4	13K LOOP BACK					
5	SO54 MARKOV					
- Pressing '*' n	- Pressing '*' needs for make completed.					

III. Ring / Sound Menu

Ring Type

'##11**'**

- There are 9-ring types.
 When you entered this menu, you can select '1~9'. After select one, press '★' to store ring type.
- If you choose '0' key instead of '★', It will be canceled.
- If you press '#' to release.

Ex)

##11+0: Just cancel. It will make a terminal to idle status.

##11+1 → assigned ring tone → * : Index 1's ring tone will be selected.

Volume Type

'##12'

- In the volume menu, you can contrast ring volume.
 Press '1' to up, and press '2' to down.
- When you determine the volume, press '*' to save, but if you press '#', don't save the volume value and exit.

DTMF

'##13'

- In the DTMF menu, you can select DTMF tone length.
- Press '*' to long, press '#' to short DTMF.

1 Min Alert

'##14'

- In the 1 Min Alert menu, you can set/release to 1 Min alert notify.
- If you press '*' to set this option, the phone will notify alert to you 1 min later in conversation.
- If you want to release this option, press '#'.

Service Alert

- In the Svc Alert menu you can set/release to Service alert notify.
- If you press '*' to set this option, the phone will notify alert to you in and out Service Area.
- If you want to release this option, press '#'.

IV. Tools Menu

Caller ID '##21

- In the Caller ID menu, you can select a CID type for your phone type.
 There are 3-types of caller ID.
 After choose one of them and press '*', the item will be stored.

- If you don't want to set a caller ID, press '#', then release.

<Caller ID types> 1. BELLCORE 2. V.23

- DTMF
- None CID (same as '#'key)

Dial Tone '##22'

- In the Dial tone menu, you can select a dial tone for your country.

 There are 6-types of dial tone type for each country.

 Press '* to set. Press '#' to release.

<Dial tone types> 1. India 2. Latin A

- Latin America
- 3. East Europe
- China / Syria 4.
- Nicaragua Default 5.
- 6.

##22 + 1 + \star : to set a dial tone as an Indian dial tone. ##22 + 6 + \star : to set a dial tone as a default dial tone.

V. Time Menu

Alarm '##31'

- In the alarm menu, you can set a alarm time that you want.
- Enter 4-digits for alarm time as 'HH-MM' type.
- If you want to set a alarm time, press '*'.
- When you press '#', the alarm time will be released.

Auto send time '##32'

- In the Auto send time menu, you can contrast an auto send time.
- There are 10-types. (1sec~10sec)
- When you choose a time, press '*' to set.
- If you press '#', the saved time will be released, and set to a default time (1sec)

<Time table>

1	2	3	4	5	6	7	8	9	0
1sec	2sec	3sec	4sec	5sec	6sec	7sec	8sec	9sec	10sec

Flash time '##33'

- In the Flash time menu, you can change flash time from 50 to 999 ms.(default: 100 ms)
- If entered time is out of ranges, it will be ignored.
- And if entered time is more than the 'on hook time', it will be ignored as well
- You can not set a flash time bigger than on-hook time.

If you want to do so, please first adjust on-hook time and then, set a flash time

- Press '*' to set. Or press '#' to release.

Ex)

##33 + 300 + *: to set the flash time to 300 ms

On Hook time '##34'

- In the On Hook Time menu, you can change the on hook time from 101 to 1000ms(default : 500 ms)
- If entered time is out of ranges, it will be ignored
- And if entered time is below than the flash time, the time will be ignored as well
- You can not set smaller value than the flash time.

If you want to do so, please adjust a flash time first, and then, set an on-hook time

- Press '*' to set, Or press '#' to release.

Ex)

##34 + 500 + * : to set the on hook time to 500 ms

VI. Setting Menu

New Code '##41

- You can change a lock code which is being '0000' as default value.
- After enter a command of '##41', you can heard a lock code sound immediately.
- At this time, You should enter the current lock code to get an authority to change a lock code.
- If the entered current lock code is right, a confirmation tone will be heard.
- After then, You can try to enter new lock code. The processes of an entering new lock code have two steps. First, you should enter a new lock code and press '*' key. And then, you should enter the lock code again to make a double check and press '*'
- If first code and second code was matched, a confirm tone will be heard. Otherwise, the codes are different. You should do all process again from beginning.
- Press '#' to cancel

Ex) Suppose that the current lock code is '7777', and user wants to change it to '8888'.

##41 → a lock-code prompt sound → 7777 → a confirmation tone → 8888 → Press * → 8888 → Press * → a confirmation tone

Restrict outgoing

'##**42**'

- You can restrict outgoing call.
- You can set a restriction by pressing★.
- Press '#' to cancel what you did.

Reset phone

- You can reset this terminal to make a default factory value.
- You can reset a terminal by pressing '*' and a FWT will be reset.
- Press '#' to cancel what you did.

Voice privacy

'##44'

- You can set the option of Voice privacy to protect your voice from tapping But It is possible only an operator supports this feature..
- You can change the option by doing follows.
 - Press '★' for changing a current value to 'Standard' option
 - Press '#' for changing a current value to 'Enhanced' option.

NOTE: If you want to change a option of the voice privacy on your conversation, you may press "* * 0*" for standard mode or "* * 1*" for enhanced mode.

Ex) Suppose a current lock code '7777'

##44 \(\Rightarrow\) a lock-code prompt sound \(\Rightarrow\) 7777 \(\Rightarrow\) a confirmation tone \(\Rightarrow\) Press \(\pi\): Enhanced \(\Rightarrow\) a confirmation tone \(\Rightarrow\) Press \(\pi\): Standard

Auto Gain Control

'##45'

- You can set AGC which is able to adjust volume level according to the order from BTS..
- After entering a command of ##45,
- Press '*' to make it enable
- Or press '#' to make it disable

SUPPLEMENTARY FEATURES (NETWORK DEPENDENT)

Call Waiting

The feature of call waiting enables you to get an incoming call while you are in a call conversation. You have an option of responding to the second call while putting the first call on hold. You can also disable the call waiting option during a particular call. Contact your service provider to activate call waiting.

Three-Way Calling

Three-Way Calling enables you to set up a three-way conversation with two other different-numbered users. Contact your service provider if you want to activate it. To use this feature, do the following steps:

- 1. Call 1st party
- 2. While in a call with 1st party, dial a number of the 2nd party
- 3. Press hook switch (or flash button)
- 4. When it connected to 2nd party, press hook switch (or flash button) again to connect all parties.

Call Forwarding

Call Forwarding enables you to forward all your incoming calls to another phone number, even if your telephone is turned off. You can continue to make a call from your telephone when the call forwarding is activated. Contact your service provider to activate this feature.

Caller ID

Caller ID notifies you who are calling you now by displaying the caller's number on the telephone's display when an incoming call comes through with a ring. This feature is available only with a telephone that has an LCD display on it. Contact your service provider to activate Caller ID.

SXT-2180 TECHNICIAN PROGRAMMING

Technician Programming Commands

CDMA WIRELESS LOCAL LOOP 1X TERMINAL SERVICE MANUAL(SXT2180)

I. Entering service mode(NAM mode) Pick up the handset.

- 2. Press **748#96*75259#", then you can hear a confirmation tone.
- Press "000000" (security code), then you can hear a confirmation tone. Now, you are in a service mode.

Current state is the main state.

If you press wrong code, you can hear an alert tone. And then you will be in idle state.

If you enter the service mode again, start again from '1'.

*Note: If a user wants to go out the service mode while he is in a main state, press "**" or take down the handset. Then the terminal will be reset. You can see the read-only data and changed data via Virtual LCD.

II. **Quick Reference Table for Technician Programming.**

CATEGORY	ITEM		SHOTKEY	FUNCTION
General (01)	Seneral (01) ESN(01) (Electronic Serial Number)		" 01 01"	Read Only Press ★ or #, then Confirmation tone is heard. Go to main state.
	CAI Ver(02) (Common Air Inter	face)	" 0 102"	Read Only Press * or #, then Confirmation tone is heard. Go to main state.
	VoiceSO(03)	WILDCARD(01)	" 01 0301"	Press *: go to main state after save. Press #: go to main state.
		EVRC(02) (Enhanced Variable Rate Codec)	" 01 0302"	Press *: go to main state after save. Press #: go to main state.
	SCM(04) (Station Control Mark) LOCK CODE(05) SLOT MODE(06)		" 01 04"	Edit as "0","1" Press *: go to main state after save. Press #: go to main state.
			" 0 105"	Read Only Press * or #, then Confirmation tone is heard. Go to main state.
			" 01 06"	Press *: Slot mode. Go to main. Press #:None Slot mode. Go to main
SLOT CYCLE INDEX(07)		EX(07)	" 01 07"	Set slot cycle index when the SXT800 is in slot mode. Edit as "0"~"1" Press * : go to main state after save. Press # : go to main state.
	RC(08) (Radio Configuration)		" 01 08"	Edit as "1"~"5" Press * : go to main state after save. Press # : go to main state.
	SPC CHANG(09) "(" 01 09"	Press * : enable

Press # : disable

				go to main state.
	SPC VALUE(10)		" 01 10"	Edit as "0"~"9" Press * : go to main state after save. Press # : go to main state.
CHANGE NAM(02)	CHANGE NAM		"02"	Press "0": use NAM 1 Press "1": use NAM 1 Press * : go to main state after save. Press # : go to main state.
SETTING NAM(03)	MCC(01) (Mobile Country Code	e) * 3 digit	" 03 01"	Edit as "0"~"9" Press * : go to main state after save. Press # : go to main state.
	MNC(02) (Mobile Network Cod	e) * 2 digit	" 03 02"	Edit as "0"~"9" Press * : go to main state after save. Press # : go to main state.
	MDN(dir number)(03)	*10 digit	" 03 03"	Edit as "0"~"9" Press * : go to main state after save. Press # : go to main state.
	MIN number(04)	*10 digit	" 03 04"	Edit as "0"~"9" Press * : go to main state after save. Press # : go to main state.
	ACCOLC(05) (ACCess OverLoad Class) 0~ 15		" 03 05"	Edit as "0"~"9" Press * : go to main state after save. Press # : go to main state.
	SETTING CHANNEL(06)	Primary CH System A(01)	" 03 0601"	Edit as "0"~"9" Press * : go to main state after save. Press # : go to main state.
		Primary CH System B(02)	" 03 0602"	Edit as "0"~"9" Press * : go to main state after save. Press # : go to main state. Edit as "0"~"9" Press * : go to main state after save. Press # : go to main state. Edit as "0"~"9" Press * : go to main state. Press * : go to main state after save. Press # : go to main state after save.
		Secondary CH System A(03)	" 03 0603"	
		Secondary CH System B(04)	" 03 0604"	
	HOME SID/NID(06)	Home SID1(01)	" 03 0701"	Edit as "0"~"9" Press * : go to main state after
		Home NID1(02)	" 03 0702"	save. Press # : go to main state.
		Home SID2(03)	" 03 0703"	3
		Home NID2(04)	" 03 0704"	
		Home SID3(05)	" 03 0705"	
		Home NID3(06)	" 03 0706"	
		Home SID4(07)	" 03 0707"	
		Home NID4(08)	" 03 0708"	
		Home SID5(09)	" 03 0709"	
		Home NID5(10)	" 03 0710"	
		Home SID6(11)	" 03 0711"	

	1		
	Home NID6(12)	" 03 0712"	
	Home SID7(13)	" 03 0713"	
	Home NID7(14)	" 03 0714"	
	Home SID8(15)	" 03 0715"	
	Home NID8(16)	" 03 0716"	
	Home SID9(17)	" 03 0717"	
	Home NID9(18)	" 03 0718"	
	Home SID10(19)	" 03 0719"	
	Home NID10(20)	" 03 0720"	
	Home SID11(21)	" 03 0721"	
	Home NID11(22)	" 03 0722"	
	Home SID12(23)	" 03 0723"	
	Home NID12(24)	" 03 0724"	
	Home SID13(25)	" 03 0725"	
	Home NID13(26)	" 03 0726"	
	Home SID14(27)	" 03 0727"	
	Home NID14(28)	" 03 0728"	
	Home SID15(29)	" 03 0729"	
	Home NID15(30)	" 03 0730"	
	Home SID16(31)	" 03 0731"	
	Home NID16(32)	" 03 0732"	
	Home SID17(33)	" 03 0733"	
	Home NID17(34)	" 03 0734"	
	Home SID18(35)	" 03 0735"	
	Home NID18(36)	" 03 0736"	
	Home SID19(37)	" 03 0737"	
	Home NID19(38)	" 03 0738"	
	Home SID20(39)	" 03 0739"	
	Home NID20(40)	" 03 0740"	
SID/NID LOCK(08)	LOCK Home SID1(01)	" 03 0801"	Edit as "0"~"9" Press *: go to main state after
	LOCK Home NID1(02)	" 03 0802"	save. Press #: go to main state.
	LOCK Home SID2(03)	" 03 0803"	
	LOCK Home NID2(04)	" 03 0804"	
	LOCK Home SID3(05)	" 03 0805"	
	LOCK Home NID3(06)	" 03 0806"	
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		T	
	LOCK Home SID4(07)	" 03 0807"	
	LOCK Home NID4(08)	" 03 0808"	
	LOCK Home SID5(09)	" 03 0809"	
	LOCK Home NID5(10)	" 03 0810"	
	LOCK Home SID6(11)	" 03 0811"	
	LOCK Home NID6(12)	" 03 0812"	
	LOCK Home SID7(13)	" 03 0813"	
	LOCK Home NID7(14)	" 03 0814"	
	LOCK Home SID8(15)	" 03 0815"	
	LOCK Home NID8(16)	" 03 0816"	
	LOCK Home SID9(17)	" 03 0817"	
	LOCK Home NID9(18)	" 03 0818"	
	LOCK Home SID10(19)	" 03 0819"	
	LOCK Home NID10(20)	" 03 0820"	
	LOCK Home SID11(21)	" 03 0821"	
	LOCK Home NID11(22)	" 03 0822"	
	LOCK Home SID12(23)	" 03 0823"	
	LOCK Home NID12(24)	" 03 0824"	
	LOCK Home SID13(25)	" 03 0825"	
	LOCK Home NID13(26)	" 03 0826"	
	LOCK Home SID14(27)	" 03 0827"	
	LOCK Home NID14(28)	" 03 0828"	
	LOCK Home SID15(29)	" 03 0829"	
	LOCK Home NID15(30)	" 03 0830"	
	LOCK Home SID16(31)	" 03 0831"	
	LOCK Home NID16(32)	" 03 0832"	
	LOCK Home SID17(33)	" 03 0833"	
	LOCK Home NID17(34)	" 03 0834"	
	LOCK Home SID18(35)	" 03 0835"	
	LOCK Home NID18(36)	" 03 0836"	
	LOCK Home SID19(37)	" 03 0837"	
	LOCK Home NID19(38)	" 03 0838"	
	LOCK Home SID20(39)	" 03 0839"	
	LOCK Home NID20(40)	" 03 0840"	
PREF SYSTEM(09)		" 03 09"	Edit as "1"~"4"
			Press 1: A only

		Press 2: B only
		Press 3:Home only
		Press 4:Home preferred
		Press * : go to main state after
		save.
		Press # : go to main state.
		Edit as "1"~"2"
		Press 1: enable
	" · - "	Press 2: disable
PRL ENABLE(10)	" 03 10"	
		Press * : go to main state after
		save.
		Press # : go to main state.
		Edit as "1"~"2"
		Press 1: enable
		Press 2: disable
OTAPA ENABLE(11)	" 03 11"	1 1033 Z. disable
OTAFA ENABLE(TT)	0311	Drace Mr. as to main state offer
		Press * : go to main state after
		save.
		Press # : go to main state.
		Edit as "1"~"2"
		Press 1: enable
		Press 2: disable
MOB_TERM_HOME(12)	" 03 12"	
,		Press * : go to main state after
		save.
		Press # : go to main state.
		Edit as "1"~"2"
		Press 1: enable
		Press 2: disable
MOD TERM FOR OID(42)	"0040"	Pless 2. disable
MOB_TERM_FOR_SID(13)	" 03 13"	5
		Press * : go to main state after
		save.
		Press # : go to main state.
		Edit as "1"~"2"
		Press 1: enable
		Press 2: disable
MOB_TERM_FOR_SID(14)	" 03 14"	
		Press * : go to main state after
		save.
		Press # : go to main state.
		FIESS # . 90 to main state.

SXT-2180 TROUBLESHOOTING

Telephone service is not working.

If the telephone service is not working, first time, check an operation of the telephone equipment and wiring connected to your SXT-2180. Test the equipment on a different service or piece of equipment to ensure proper operation, or connect a known good telephone device to the phone port on the SXT-2180 unit. This will verify the condition of the telephone equipment and the internal wiring of the telephone service to ensure that it's working properly. If the telephone system or wiring is not working properly, replace or repair the equipment as required. Otherwise, contact your cellular provider or your authorized Sungil distributor.

Unable to Receive Incoming Calls

If more than one telephone or telephone device is connected to your SXT-2180, make sure that all devices are "on-hook" (hung up). If one extension is "off-hook" (off its cradle), none of the extensions on your phone line will ring when an incoming call occurs.

Moisture or Ventilation Problems

Visually inspect your SXT-2180's unit enclosure. Moisture can damage the equipment. Ventilation is also very important. If there are moisture or ventilation problems, move your SXT-2180 to correct as necessary. See the Temperature Environment section of this Guide.

No Power

The power LED lamp on the front of your SXT-2180 indicates the unit's power condition. If the LED is GREEN, your SXT-2180 is receiving power. If the power cord is connected and the LED lamp is not lit, the SXT-2180 is not receiving power. Verify that the AC power source and its corresponding circuit breaker are functioning properly.

Battery Backup Failure

If you're using the battery, the unit must be connected to AC power for at least ___hours to fully charge the battery before it will provide back-up power to your SXT-2180. Verify that the battery has been charged for at least 15 hours and that the power source and its corresponding circuit breaker are functioning properly. Then, examine the battery for physical damage and corrosion. Replace the battery if necessary.

Item	Description
Capacity	3.7V Li-ion(Nominal) / 1700mAh
Talk Time Duration	2 Hours (Min)
Standby Time Duration	30 Hours(Min)
Charging Time Duration	4 Hours (Max)

GENERAL INFORMATION AND SAFETY

Your SXT-2180 Fixed Wireless Terminal (FWT) functions as both a radio transmitter and receiver. When it is ON, the FWT receives and sends out radio frequency (RF) energy. The CDMA 800 unit operates in the frequency range between 824 and 894 MHz, and the CDMA 1900 between 1850 MHz and 1990 MHz. Both employ commonly used phase/frequency modulation techniques. When you use your SXT-2180, the cellular system handling your call controls the power level at which your unit transmits. Nominal power output is 230 mW.

WARNING!

Your SXT-2180 must be placed or mounted on a flat surface to allow proper ventilation. Do not block the air vents or the space beneath your SXT-2180 as this could cause the unit to overheat and fail.

WARNING!

Only Authorized Service Personnel should remove the cover of your SXT-2180. For further assistance, contact your Authorized Sungil Representative. Please have your unit's model and serial number ready. The duration of your calls and operate your phone in the most power-efficient manner.

Safe Operation Requirement

Do not operate your SXT-2180 when any person is within 1 inch (2,5 cm) 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 SXT-2180 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 SXT-2180.

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.

Exposure to 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 SXT-2180 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 SXT-2180 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 SXT-2180 to prevent damage to the unit.

Blasting Areas

Construction crews often use remote control RF devices to activate off explosives. Therefore, to avoid interfering with blasting operations, turn your SXT-2180 OFF when in a "blasting area" or in areas posted: "Turn off two-way radio."

FCC WARNING

This equipment may generate or use radio frequency energy. Changes or modifications to this equipment may cause harmful interference unless the modifications are expressly approved in the instruction manual. The user could lose the authority to operate this equipment if an unauthorized change or modification is made.

RF Exposure Guidelines

During transmitter operation, in order to meet RF Maximum Permissible Exposure Safety Guidelines, a minimum distance of 20cm shall be maintained between antenna and personnel.