# SXP-2280 CDMA 1XRTT

# FIXED WIRELESS PHONE

800 MHz CDMA



# TECHNICAL MANUAL

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Before installing your **SXP-2280**, 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 SXP-2280 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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### **1.1 ICCB Construction**



**1.2 Button Layout** 



ICCB has 15 keys which are numeric keys(0-9), \*, #, Recall, Recall and ICC key. Each key is used to make call but under specific menu internally, \*, #, Redial, Recall and ICC key could be used as function key.

### 0-9: Number Button

\*,#,Recall,Redial and ICC : Used at not only making call but also operation as follows,

- \*: The Cancel / Previous key to cancel what a user did or go previous menu.
- #: The Store/Confirmation key to store/confirm what a user did like editing in editor. Recall: The up key for item selection on the menu.

Redial: The down key for item selection on the menu.

ICC: ICC stands for Indian Calling Card and this key has specific number for each region. This key is able to work only under "Insert Coin" status on LCD and don't work at other status.

### **1.3 Coin Selector**

The below picture is shown coin selector structure. The specification of it is as follows.



- Supports 1 Rs and 5 Rs.
- Maximum two coins for 1Rs and 5Rs. Under maximum insertion like two 1Rs and two 5Rs, when a user inserts coin, it will be refunded.
- If a user inserts coins within 1 sec between coins, they will be just refund to avoid coins jam.

### 1.4 Coin Box

A coin box installed at bottom of ICCB can store 500 coins for 5Rs. internally, whenever coins drop into coin box, Coin Counter increase by one and it let "Box Full" message come out when it would reach 500 coins and a user cannot make a call under this message. At this moment, a shop keeper (an operator) can initial this coin counter with removing coins from coin box. To

initialize coin counter, a operator should go "Programming Mode" menu and make counter zero.

## 2. Menu Construction

# 2.1 Menu Tree

To enter to the programming mode (ICCB Mode)				
1) Open the ICC	B.			
2) To enter to this	s menu, Please follow	v below instructions.		
On-Hook hand	lset -> Press Progran	nming mode button on	the main board -> Off-Hook handset.	
3) First menu, "1	.Cash Record" will be	e displayed (ICCB Mod	de).	
Programming		1:Cumu. Coins	Show to Cumulative Coins	
Mode		2:Current Coins	Show to Current Coins	
(ICCB	1.Cosh Booord	3:Cumu. Reset	Reset Cumulative Coins	
Mode)	1.Cash Record	4:Current Reset	Reset Current Coins	
		5:Daily Coins	Show to Daily Coins	
		6:Last Call List	Show to list for last call	
	2:Local Prefix	92 CODE		
	3:MT code option	MT code YES		
		MT code NO		
	4:Tariff	1:Enter code		
		2:Tariff View		
	5:ICC NUMBER			
	6:Display	1:Show Option	Selection to Banner or Date&Time	
		2:Banner	Editing the Banner "TATA Indicom"	
			a) AM/ PM Type	
		3:Date&Time	b) 24 Hours Type	
			c) Day of Week Type	
		1:Earpiece Vol		
		2:Ringer Vol		
	7.Sound	3:Speaker Vol		
	7:Sound	4:Key beep Vol		
		5:Ring Tone		
		6:Service Alert		

	8:S/W Version				
	9:Password			Tai	riff Password
To enter to the C	DMA mode				
1) Press the sho	rt keys follows " <b>6</b> 2	24709	9247*2690"		
2) The message	on LCD will be di	splay	ved "Enter <mark>Code</mark> ****"	-	
3) Enter your pas	ssword "0000"(It	can l	be changed )		
4) First menu, "1	.Setting" will be d	isplay	yed.		
	1:Setting	1	:Voice Privacy		
		2	:DTMF Tone		
		3	:Password		
CDIMA MODE		4	:AutoCall Time		
Merid		1	:S/W Version		
	2:Version	2	:H/W Version		
		3	:PRL ID		
1) To enter to Co	1) To enter to Conversation Menu.				
2) Press the "Re	edial" Button on	Con	versation		
3) You can show	v the LCD mess	age "	1.Voice Privacy"		
Conversation	1.Voice Privacy				
Menu					
	2.DTMF Tone				
To enter to NAM Mode Menu.					
1) Press the sho	1) Press the short keys follows "47*869#*75259#"				
2) The message on LCD will be displayed "PASSWORD".			<sup>33</sup>		
3) Enter your pas	3) Enter your password "000000" ( It can be changed )				
4) First menu, "1	.GENERAL" will I	be dis	splayed.		
	01. ESN				Read Only
	(Electronic Serial Number)		Read Only		
	02. CAI Ver			Pood Only	
	(Common Air Interface)				
	03.SO	EVRC	2		MSM6000 Chip just supported the
01. General	(Service Option)	(Enha	anced Variable Rate Code	c)	EVRC.
	04. SCM	04. SCM			
	(Station Control Mark)			·	
	05. LOCK CODE			Read Only	
	06. SLOT MODE				

	07. SLOT CYCLE INI	DEX		
	08. RC (Radio Config	uration)	For CDG2 Testing	
	09. SPC CHANG			
	10. SPC VALUE			
	01. Current NAM		You can selection the NAM1	or NAM2
02. Setup NAM	02. NAM 1			
	03. NAM 2			
	01. MCC		(Mobile Country Code)	* 3 digit
	02. MNC		(Mobile Network Code)	* 2 digit
	03.MIN			*10 digit
	04.PHONE NO#		(Directory Number) * 10 digit	t
	05. ACCOLC		(ACCess OverLoad Class)	0~ 15
		01. Primary CH System A		
	06.PRIMARY CH.	02. Primary CH System B		
		01. Secondary CH System A		
	07.SECOND CH.	02. Secondary CH System B		
	08. ACQ SID			
01 NAM 1	09. LOCK SID			
	10.H-S/NID Enable	CDMA HOME SID Enable		
02 NAM 2		Yes or No		
	11. HOME SID/NID	Home SID1~20		
		Home NID1~20		
		LOCK Home SID1~20		
	12.01D/NID LOCK	LOCK Home NID1~20		
	13. CDMAPREF SYS	TEM		
	14. PRL ENABLE			
	15. PRL ID			
	16. OTAPA ENABLE			
	17. MOB_TERM_HOME			
	18. MOB_TERM_FOR_SID			
	19. MOB_TERM_FOR_NID			

# 2.2 Short Key List

Key Items	Action Keys	Description
А-Кеу	*75259#147*359#	To enter A-Key.
CDMA Mode Menu	624709247*2690	To enter to CDMA Menu.
NAM Mode Menu	47*869#*75259#	To enter to NAM Mode Menu.
Set ICCB Password	Program mode	Whenever Shop keeper would forget ICCB
to default value.	push button + 5	Password, he can use it to make a password
	times pressing	as default "3842"
	emergency button +	
	'1036'	
Set CDMA Menu	Program mode	Whenever Shop keeper would forget CDMA
Password to	push button + 5	mode Password, he can use it to make a
default values.	times pressing	password as default "0000"
	emergency button +	
	'4263'	
Master Clear	##**90 or	In the factory, for product's initialization for
	##**47*869#90	menu's values.
Current Coin Count	*1*	It will display how many coins are there in box
		currently.
Conversation Menu	Conversation state	To see the conversation menu on conversation
	+ Redial button	as follows
		1) Voice Privacy
		2) DTMF Tone
Conversation	Emergency button	To adjust earpiece volume level.
Volume for		
earpiece		
NAM Mode Menu	47*869#*75259#	To enter NAM mode
		1) General
		2) Setup NAM
		A. Current NAM
		B. NAM1 => JUST USED
		C. NAM2
		For examples, you can change to the PRL
		enabled/Disable, HOME SID/NID or MIN
		number.

### 2.3 ICCB User Mode Display

ICCB User Mode (Normal Call)			
1 Handset On-Hook	TATA Indicom		
	or		
	MM/DD/YY hh:mm		
	or		
	According to Display Menu in CDMA Menu you can change display type		
	like the upper. Default is logo as "TATA Indicom"		
2 Handset Off-Hook	INSERT COIN		
	- This screen request for insertion coin to make call. But registered free call		
	numbers are available.		
	- During 45 secs, you didn't anything. Some alarm will be occurred on		
	handset.		
3 After Insertion coin.	PLEASE DIAL		
	114		
4 Dial numbers			
	- From Left, what you dialed will be displayed. Automatically it will make a		
	call in 4 secs after dialing numbers.		
5 Not match with Tariff			
	Not Available		
6 Making Call			
(In case of Ordinary Call)	Calling		
7 Connected Call.			
(in case of Ordinary Call)	- On conversation, Value, time will be displayed( 00Rs Time 0:00 )		
	- Will display remained time and coin will be dropped in the inside box. At		

	this time, whenever every 10 is remained, Alarm will be made one time		
	and after then after 2 secs until call ends, Alarm will be made.		
	- During alarm sound, If you would insert coin, Alarm sound will disappeared		
	no more.		
	- In case of local call, After current 60 secs would be used up, just inserted		
	coin will be dropped to the box and new 60 secs will be displayed an		
	you can keep talking without stoping		
	- If you don't insert coin at this time, Call will end and screen will go to		
	"Insert Coin" screen.		
	(INSERT COIN)		
	- Available talking time for each inserted coin will be displayed as much as		
	value which was set on Call duration menu on ICCB mode.		
	% In case of international call, it is 10 secs.		
8 Conversation Menu	Conv Monu		
(by Pressing Redial Button)			
	- On the conversation, If you press Redial Button, Conversation Menu		
	will come up as follows.		
	1.Voice Privacy		
	2.DTMF Tone		
9 Ending call			
Ŭ	00:00		
	- Totally elapsed time will be displayed during 15 sec. ( Need to be		
	discussed with PTB team )		
10 Incoming			
	Incoming Call.		
11 Recalll			
	RECALL		
	<ul> <li>In case ICCB has remained time after call.</li> </ul>		
	Disaply text should be discussed with PTB team.		

12 Redial	REDIAL
	- in case of only IDLE state, Pressing Redial key can dialed last numbre
	which was made successfully.
	- In case of no history, nothing is happened.

# 2.4 ICCB User Mode Display for Emergency Call and Toll Free

ICCB User Mode (Emergency Call)			
1 Emergency button	<ul> <li>If you press Emergency button, "Please Dial" will be displayed in stead of "Insert Coin" message on LCD</li> <li>Be used at Virtual calling card number and real emergency number like 100,101.</li> </ul>		
2 Dial numbers	<ul> <li>Available emergency numbers are 100, 101, 102.</li> <li>If dialed number is not emergency number, "Not available" message will be displayed.</li> </ul>		
3 Try to make call	Emergency Call - On Calling, "Emergecny Call" will be displayed - In case of Toll free number, "Toll Free Call" will be displayed Toll Free Call (It should be discussed with JP)		
4 During Conversation	Time 00:60 - Only Time will be displayed. (Time 0:00)		

### 2.5 ICCB Menu (Programming Mode)

To enter to the ICCB Programming Mode

- 1) Open the Coin Box
- 2) To enter to this menu, Please follow below instructions.

On-Hook handset -> Press Programming mode button on the board -> Off-Hook handset.

- 3) The message on LCD will be displayed "Enter Code \*\*\*\*".
- 4) Enter your password "3842" ( it can be changed )
- 5) First menu, "1.Local Prefix" will be displayed (ICCB Mode)

Press '#': Saved and go back to the programming mode.

Press '\*': Go back to the programming mode.

Menu Display	Sub Menu Display	Description
1:Cash Record	<mark>1: Cumu. Coins</mark>	Press '1', show to cumulative coins collected since
	Press '#'	installation.
	Cumu.Tot 0000000	
	Press 'Recall' or	Press 'Recall', Menu Next Up as follows
	'Redial'	Press 'Redial'. Menu Next Down as follows
	Press '*' or '#'	Cumu.Tot 0000000
		Cumu.Use 0000000
		Cumu.5Rs 0000000
		Cumu.1Rs 0000000
		Press '*', Go back to the root menu.
		Press '#',Saved and go back to the root menu
	2: Current Coins	Press '2', show to current coins collected in the cash
	Press '#'	box.
	Curr.Tot 00000	Press 'Recall', Menu Next Up as follows
	Press 'Recall' or	Press 'Redial'. Menu Next Down as follows
	'Redial'	Curr.Tot 00000
	Press '*' or '#'	Curr.Use 00000
		Curr.5Rs 00000
		Curr.1Rs 00000
		Press '*', Go back to the root menu.
		Press '#',Saved and go back to the root menu
		% It counts the collected coins upto 700, After it shows
		BOXFULL.

	<mark>3:Cumu. Reset</mark>	Press '3', You can erase cumulative coin counter
	Press '#'	Del Cumu.Coins?
		Press '*', Go back to the root menu.
		Press '#', resetting the current coin counter.
	4: Current Reset	Press '4', You can erase current coin counter.
	Press '#'	Del Cur.Coins?
		Press **, Go back to the root menu.
		Press '#', resetting the current coin counter.
	5: Daily Coins	Press '5', show to day total rupee with coin counts.
	Press '#'	Press ***, Go back to the root menu.
	Day 0000Rs 000Cn	Press '#',Saved and go back to the root menu
	Press '*' or '#'	
	5: Last Call List	Press '5', show to last calls information with number, time
	Press '#'	and rupee about up to 10 calls.
	01: Phone number	Press '1', Move Next Up for last calls.
	Press '1' or '2', '#'	Press '2', Move Next Down for last calls.
		01: Phone number
		Press '#' => Show to the information as follows
		<mark>Rs 0000 Coin 000</mark>
		Press '*', Go back to the root menu.
		Press '#',Saved and go back to the root menu
2:Local Prefix	92 Code XXXXXXX	
3:MT Code Option	<mark>MT code Yes</mark>	Press 'Recall', Move up to the next mode.
	Press 'Recall', 'Redial'	Press 'Redial', Move Down to the next mode.
	Press '*' or '#'	MT code Yes
		Press '*', Go back to the root menu.
		Press '#'
		Enter Code 56
		Press '1~9,0', If you want to change the MT code, press
		the number.
		Press '#', Updated the option
		MT code No
		Press '*', Go back to the root menu.
		Press '#', Updated the option
4:Tariff	1:Enter Code	You can make tariff
Drees (#)	Press '#'	

Enter PWD XXXX	Input No XXXXXXX	
	Press '#'	
	Input sec XXX	
	Press '*' or '#'	
	2:View Tariff	You can show Tariff
	Press '#'	
	<mark>01:91 20s</mark>	
	Press 'Recall', 'Redial'	
	Press '*' or '#'	
5:ICC Number		press free call number
	1: Show Option	Press '1'. Entering the Show Option menu.
	Press '#'	Press 'Recall', Move up to the next mode.
	Show Date&Time	Press 'Redial', Move Down to the next mode.
	Press 'Recall', 'Redial'	Show Blank
	Press '*' or '#'	Show Banner
		Show Date&Time
		Press '*', Go back to the root menu.
		Press '#', Updated the option
	2: Banner	Press '2', You can show to currently banner.
	Press '#'	Press '#', Entering the editing mode
6.Dioploy	' TATA Indicom '	Press 'Redial', insert space
6:Display	Press '*' or '#'	Press 'Emergency.', Big or Small alpha mode
		Press '*', Go back to the root menu.
		Press '#', Updated the option
	3: Date&Time	Press '3', Entering the Date&Time menu
	Press '#'	Press 'Recall', Move up to the next mode.
	DTSet DayOfWeek	Press 'Redial', Move Down to the next mode.
	Press 'Recall', 'Redial'	DTime DayOfWeek
	Press '*' or '#'	DTime 24Hours
		DTime AM/PM
		Press '*', Go back to the root menu.
		Press '#', Updated the option.
	1: Earpiece Vol.	Press '1', Entering the volume of earpiece menu
7:Sound	Press '#'	Press 'Recall', Volume Up
1.30unu	EarVol. >>>>	Press 'Redial'. Volume Down
	Press 'Recall', 'Redial'	Press '*', Go back to the root menu.

	Press '*' or '#'	Press '#', Updated the volume level.
	2: Ringer Vol.	Press '2', Entering the volume of ringer menu
	Press '#'	Press 'Recall', Volume Up
	RingerVol. >>>>	Press 'Redial'. Volume Down
	Press 'Recall', 'Redial'	Press '*', Go back to the root menu.
	Press '*' or '#'	Press '#', Updated the volume level.
	3: Speaker Vol.	Press '3', Entering the volume of speaker menu
	Press '#'	Press 'Recall', Volume Up
	<mark>SpeakerVol. &gt;&gt;&gt;&gt;</mark>	Press 'Redial'. Volume Down
	Press 'Recall', 'Redial'	Press '*', Go back to the root menu.
	Press '*' or '#'	Press '#', Updated the volume level.
	<mark>4: Key Beep Vol.</mark>	Press '4', Entering the volume of key beep menu
	Press '#'	Press 'Recall', Volume Up
	KeyBeepVol. >>>>	Press 'Redial'. Volume Down
	Press 'Recall', 'Redial'	Press **', Go back to the root menu.
	Press '*' or '#'	Press '#', Updated the volume level.
	5: Ring Tone.	Press '5', Entering the ring tone selection menu
	Press '#'	Press 'Recall', Up
	Press 'Recall', 'Redial'	Press 'Redial'. Down
	Press '*' or '#'	Press '*', Go back to the root menu.
		Press '#', Updated the ring tone items.
	6: Service Alert.	Press '6', Entering the Service Alert menu
	Press '#'	Press 'Recall', Service Alert is On
	<mark>SvcAlert On</mark>	Press 'Redial', Service Alert is Off
	Press 'Recall', 'Redial'	Press '*', Go back to the root menu.
	Press '*' or '#'	Press '#', Updated the option
8:S/W Version		You can show to the s/w version.
9:Password	New xxxx	You can show to the <b>current password</b> , default -> 3842
	Press '#'	Press '#', Entering the next mode for entering the new
	Re-Enter xxxx	password
	Press '*' or '#'	Press '1~9,0', If you want to change the new password,
		press the number.
		We should be <b>re-enter the new password</b> .
		Press '#', Updated the new password.

# 2.5 CDMA Mode Menu

To enter to the CDMA mode

- 1) Press the short keys as follows "624709247\*2690"
- 2) The message on LCD will be displayed "Enter Code \*\*\*\*".
- 3) Enter your password "0000" ( It can be changed )
- 4) First menu, "1.Setting" will be displayed.

Menu Display	Sub Menu Display	Description
	1: Voice Privacy	Press '1', Entering the Voice Privacy Menu.
	Press '#'	Press 'Recall', Changed the option to <mark>'Standard'</mark> as follows
	V.P. Enhanced	V.P. Standard
	Press 'Recall', 'Redial'	Press 'Redial', Changed the option to <mark>'Enhanced'</mark> as follows
	Press '*' or '#'	V.P. Enhanced
		Press '#', Go back to the root menu.
	2: DTMF Tone	Press '2', Entering the DTMF Tone Menu.
	Press '#'	Press 'Recall', Changed the option to <mark>'Short'</mark> as follows
	DTMF Tone Short	DTMF Tone Short
	Press 'Recall', 'Redial'	Press 'Redial', Changed the option to <mark>'Long'</mark> as follows
1 Cotting	Press '*' or '#'	DTMF Tone Long
Proce '1'		Press '#', Go back to the root menu.
Press I	3: Password	Press '3', Entering the next mode for entering the new
	Press '#'	password.
	New xxxx	Press '1~9,0', If you want to change the new password, press
	Press '#'	the number.
	<mark>Re-Enter xxxx</mark>	We should be <b>re-enter the new password</b> .
	Press '*' or '#'	Press '#', Updated the new password.
	4: Auto Call Time	Press '4', Entering the auto send time menu for orig. call
	Press '#'	Press 'Recall', Up for time count
	AutoCallTime XX	Press 'Redial'. Down for time count
	Press 'Recall', 'Redial'	Press ***, Go back to the root menu.
	Press '*' or '#'	Press '#', Updated the auto send time.
	1: S/W Version	Press '1', Entering the <b>S/W Version</b> menu.
2.Version	Press '#'	Press **, Go back to the root menu.
Press '2'	<mark>S/W:XXXXXXXXX</mark>	
	Press '*'	

	2: H/W Version	Press '2', Entering the H/W Version menu.
	Press '#'	Press '*', Go back to the root menu.
	H/W:XXXXXXXXXX	
	Press '*'	
	<mark>3: PRL ID</mark>	Press '3', Entering the PRL ID menu.
	Press '#'	Press '*', Go back to the root menu.
	PRL ID:XXXXXXXX	
	Press '*'	
	1: Debug Screen	Press '1', Entering the <b>Debug Screen</b> menu.
	Press '#'	You can enter the debug mode and you can show to the
	Debug Screen	system information on CDMA network as follows.
	Press '#'	R 100 E 07 T 00
		S 01243 N 00012
		C 1011 PN 122
		B 3.998V
		Press '*', Go back to the root menu.
	2: Test Call	Press '2', Entering the Test Call menu.
	Press '#'	Press 'Recall', Move up to the test call item.
	TCall xxxxxxx	Press 'Redial', Move down to the test call item.
	Press 'Recall', 'Redial'	Press 'recall', We can call on the selected option item.
<mark>0.Hidden</mark>	Press 'recall'	Press '*', Go back to the root menu.
Press '0'	Press '*' or '#'	% Below show to the selected item,
		Markov~Loopback
	3: Audible Tone	Press '3', Entering the Audible Tone menu.
	Press '#'	Press 'Recall'. Move up to a tone item.
	A.Tone xxxxxxxx	Press 'Redial, Move down to a tone item.
	Press 'Recall', 'Redial'	Press '#', Updated the tone item.
	Press '*' or '#'	% Below show to the selected item.
		Korea,
		LatinAmerica,
		East Europe,
		China/Siri,
		Nicaragua,
		India

4: Mirroring	Press '4', Entering the mirroring menu.
Press '#'	Press 'Recall', Do mirroring
Do Mirroring	Press 'Redial', RestoreMirroring
Press 'Recall', 'Redial'	Press '#', Updated the selected item.
Press '*' or '#'	

### **Battery Backup Failure**

If you're using the battery, the unit must be connected to AC power for at least 3 hours to fully charge the battery before it will provide back-up power to your SXP-2280. Verify that the battery has been charged for at least 3 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	Over 3 Hours (Min) ( on SCI = 2)
Standby Time Duration	Over 140 Hours ( on SCI = 2)
Charging Time Duration	3 Hours (Max) ( on SCI = 2)

### **GENERAL INFORMATION AND SAFETY**

Your SXP-2280 Fixed Wireless Phone (FWP) functions as both a radio transmitter and receiver. When it is ON, the FWP receives and sends out radio frequency (RF) energy. The CDMA 800 unit operates in the frequency range between 824 and 894 MHz. When you use your SXP-2280, the cellular system handling your call controls the power level at which your unit transmits. Nominal power output is 230 mW.

### WARNING!

Only Authorized Service Personnel should remove the cover of your SXP-2280. 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.

### **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 SXP-2280 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 SXP-2280.

#### 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 SXP-2280 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 SXP-2280 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 SXP-2280 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 SXP-2280 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.