

# **User Manual**

# CDMA Fixed Wireless Voice Terminal



### **INTRODUCTION**

# OVERVIEW

TX240G is a Fixed Wireless Terminal designed to provide better wireless connectivity between wired landline telephone (POTS) and CDMA 800/1900 dual bands network with high sensitivity to receive signal and large transmitting power to expand extensively the effective coverage of CDMA service. Global Positioning System (A-GPS) feature provides E911 service with accurately determining the location of caller.

### FEATURES

- CDMA2000 1x (backward compatible to IS-95 A/B) 800/1900 MHz Dual Bands
- A-GPS for E911 (SMA Antenna Connector)
- TTY/TDD Telephone Support
- 3 multi-colored LED Indicators (Signal, Mode, Voice Mail Waiting and Power)
- 2 R-J11 Ports (with max. 5 REN)
- Dial-Tone and DTMF Generation
- Desktop and Wall-Mountable
- Call Waiting, Three-way Calling and Call Forwarding
- Call Restriction
- Type II Caller ID (or Call Waiting ID)
- OTA(IS-683A)



# 

- 1. Avoid placing the terminal in a dusty location, or near a source of gas or fire.
- 2. Don not shake, hit or drop the terminal.
- To clean the outside of the terminal, use only a soft, dry cloth. The chemicals in alcohol, benzene or Acetone can damage the surface of the terminal.
- 4. Do not twist or pull the cables.
- 5. Do not disassemble the terminal.
- 6. Do not use the power adapter if:
  - The power cord is damaged.
  - The adapter has been damaged in any way.
- Use only the AXESSTEL provided adapter. Do not use the AXESSTEL adapter for any other Purposes.
- 8. Use only the AXESSTEL provided antenna. Do not use the antenna for any other purposes..
- Frequency and length of use can affect the life of the self-charging battery. Contact your customer service if the battery is not operating properly.
- Use only the designated self-charging battery. Dispose of exhausted batteries properly. Never discard a battery in or near fire or flame.
- 11. Do not use the terminal near water, for example, near a bathtub, sink, wet basement, or swimming pool.

NOTE: The input voltage and the shape of the plug may vary from country to country.

TX240G User Manual Ver. 0.2



## PACKAGE CONTENTS

After opening the package, check to make sure that you have all the parts shown below. If any item is missing or broken, please call customer service.

- Axesstel 1x Fixed Wireless Terminal
- CDMA Dipole Antenna
- GPS Antenna with Cable
- Power Adapter (Input: AC100-240V, 50/60Hz / Output:5V/2A)
- Backup Battery
- User Manual or Quick Guide
- RJ-11 Phone Cord
- PSTN Tester
- RJ11 Cross Adaptor



**CAUTION:** Use the provided power adapter only. Using other power adapter may damage the Terminal permanently.



### INTERNAL BATTERY INSTALLATION

This TX210G operates by receiving electricity from an electrical outlet or internal battery.

- 1. Open battery cover on the bottom side of the terminal.
- 2. Connect the Battery power cable to terminal.
- 3. Insert the battery pack in the right position between the hold bars.
- 4. Close the battery cover.



### Setting up the Terminal

- 1. Connect the antenna by screwing into the TNC connector of the back of the terminal.
- 2. Connect an analog phone or cordless telephone to the terminal using an RJ-11 cord.
- NOTE: Use the wire landline telephone compatible to FCC part 68 only. Non-compliant phones may





- 3. Plug the AC adapter jack into the DC 5V jack of the Terminal.
- 4. Plug the AC adapter plug into an appropriate electrical outlet.

### Connecting the terminal to home phone wall outlet.

5. TX240 can be connected to the home wall phone jack to allow users to use phones from any home

wall jack if the home wall phone jacks do not have existing service and are not powered. Before

connecting the terminal to home wall jack, please make sure that the home wall jacks are not live and

do not have any power. To test, please see the next section, "Wall Jack Tester".

### WALL JACK TESTER (PSTN Tester)

Optional wall jack tester check if the wall phone jack is powered by existing or previous landline phone

service.

### **IMPORTANT NOTE**

**DO NOT CONNECT YOUR TERMINAL TO WALL JACK IF PSTN LINE IS STILL IN SERVICE.** Connecting the terminal to the live wall jack may interfere with the existing phone service and/or damage the terminal.

1. Plug the tester into the wall jack.

2. If tester's Green colored LED turns on, PSTN line is still live and powered. In this case contact you rexisting or previous landline phone service provider to disconnect the power. Alternately, 2-line cross adapter may be used to bypass the powered first phone line (pin 2 and 3) if the second line (pin 1 and 4) is not powered.

3. If Green colored LED does not turn on, wall phone jack is not powered and you can safely connect

your terminal to wall jack.





### WALL MOUNT INSTALLATION

- 1. Mark two mounting holes' locations to match the screw hole in the back of the terminal.
- 2. Drill two holes at the marked locations.
- 3. Tighten the screws until the head is about 5mm from the wall.
- 4. Plug in the power connector and route the cord in the groove, if needed.
- 5. Screw the antenna into antenna connector.
- 6. Hang the terminal on the screw using the two holes in the back.
- 7. Push the terminal down until the unit is firmly locked into place.





## A-GPS for E911

Your terminal supports AGPS feature to meet U.S. FCC 911 mandate making the location of a terminal available for callers in emergency situations. During the emergency call, all the LEDs on the terminal blink and your location can determined by the service provider.. In order to increase the location accuracy, the external GPS antenna must be connected to and positioned at a location that can receive satellite signals, such as outside the building or near the windows.



- 1. Connect the antenna to the GPS SMA connector on the terminal.

- 2. Place the Magnetic Pad at a location that has no obstruction to the sky, such as outdoor or windows.
- 3. Put the A-GPS antenna on the magnetic pad and position the antenna to face outside.

Note: Any obstruction to sky will degrade the GPS signal and degrade location accuracy.





TX240G User Manual STD Ver. 0.2

# **GETTING TO KNOW THE TERMINAL**

### LED INDICATORS

Item	Color	Status	Description	
Power		Solid	In Battery Mode: Fully Charged	
	Green		In Adaptor mode: Connected	
		Blinking	Charging	
	Orange	Solid	Mid Battery Level	
		Blinking	Battery Error	
	Red	Solid	Low Battery	
		Blinking	Low Battery Warning	
	Off	-	No Battery	
	Green	Solid	Excellent Signal	
Signal	Orange	Solid	Good Signal	
111	Red	Solid	Low Signal	
		Blinking	Limited Service	
	OFF	-	No service	
Mode	Green	Solid	Off-Hook or In Use	
		Blinking	Incoming Call	
	Orange	Solid	-	
		Blinking	Voice Mail Waiting	
	Red	Solid	-	
		Blinking	-	
E911 Call	All LEDs	Blinking	-All LEDs blink during emergency call	

TX240G User Manual Ver. 0.2



# **Basic Operation**

**POWER ON/OFF** 

**MAKING CALLS** 

**RECEIVING CALLS** 



### **POWER ON / OFF**

#### Power switch is located on the back side of the terminal

- 1. Turn on the unit by moving switch to ON position.
- 2. Turn off the unit by moving switch to OFF position.
- NOTE: When you turn on the terminal, it automatically searches for service signal.

After successfully acquiring service signal, the Signal LED turns to Green, Orange or

Red depending on signal strength.

### MAKING CALLS

- 1. Check if the terminal is turned on.
- 2. Pick up the handset of the phone.

3. If you hear the dial tone, dial the desired telephone number by, using the analog phone or cordless phone keypad.

Note : Dial number of maximum 32 digits, including \* and #, can be entered.

4. Wait for about 3 seconds until the call is automatically made by the terminal. (Auto dial time can

be configured from 3 seconds to 9 seconds, or off)

Note: Press <#> button to make call right away after entering the dial number.

5. When the other recipient answers, begin conversation.

Note: If Connection Alert is turned on, a beep is heard when the call is connected.

6. To hang up, put the phone receiver back on the phone or press TALK or OFF button on your phone.

### **RECEIVING CALLS**

### The analog phone or cordless telephone(s) connected to the terminal ring when an incoming

#### call come in.

- 1. Pick up the telephone receiver to answer the call.
- 2. To disconnect after finished, replace the handset on the phone.

Note: If using cordless phone, press TALK or ON button to answer the phone call. Refer to analog

TX240G User Manual Ver. 0.2



phone or cordless phone user manual for instruction.

- Note 1: Make sure that the attached telephone's ringer is enabled.
- Note 2: When there is an incoming call when you are already holding the receiver, press any

key on the numeric keypad to answer the call.



TX240G User Manual STD Ver. 0.2

# **Advanced Features**

Sound	Adjusting Voice Volume		
	Adjusting Alert Volume		
	Setting One Minute Alert		
	Setting Voice Privacy Alert		
	Setting Connection Alert		
General	Setting Caller ID		
	Setting Auto Send Time		
	Setting DTMF Length		
Security	Changing Lock Code		
	Restricting Ongoing Calls		
	Factory Reset		
TTY/TDD	Mode Setting		



## ADJUSTING VOICE VOLUME

### You can control the volume level of the terminal

- 1. Pick up the handset and check the dial-tone.
- 2. Press <\*><\*><1><1><\*> to raise the voice volume
- 3. Press <\*><\*><1><1><#> to lower the voice volume
- 4. A confirmation beep will sound for 3 seconds
- **Note1:** Some telephones may have their own volume control. Use both the terminal and the telephone volume controls to optimize the sound level.
- Note2: Volume can not be adjusted while conversation is in progress.

### ADJUSTING ALERT TONE VOLUME

- 1. Pick up the handset.
- 2. Press <\*><\*><1><2><\*> to raise the alert tone volume.
- 3. Press <\*><\*><1><2><\*> to lower the alert tone volume.

### SETTING ONE MINUTE ALERT

When this feature is enabled, a discrete tone is generated at each one minute interval on the receiver during conversation for both incoming and outgoing calls. This tone is to help the user keep track of the phone usage.

### To change the setting,

- 1. Pick up the handset.
- 2. Press <\*><\*><1><3><#> to enable the feature.
- 3. Press <\*><\*><1><3><\*> to disable the feature..

### SETTING VOICE PRIVACY ALERT

### If enabled, beep is generated when Voice Privacy is on.

To change the setting:

- 1. Pick up the handset.
- 2. Press <\*><\*><1><4><#> to enable the feature.
- 3. Press <\*><\*><1><4><\*> to disable the feature..

## SETTING CONNECTION ALERT



### If enabled, a discrete tone is generated on the receiver when the call is connected.

- To change the setting:
- 1. Pick up the handset.
- 2. Press <\*><\*><1><5><#> to enable the feature.
- 3. Press <\*><\*><1><5><\*> to disable the feature..

NOTE: The default setting may depends on the service provider.

### SETTING CALLER ID MODE

If your phone connected to the terminal is caller ID enabled, you can set the terminal

to display the caller identification number or name on the LCD display of the analog phone.

- 1. Pick up the handset.
- 2. Press <\*><\*><2><1><0><#> to disable the Caller ID feature.
- 3. Press <\*><\*><2><1><1><#> to enable DTMF Standard Type.
- 4. Press <\*><\*><2><1><2><#> to enable FSK (Bellcore) type.

NOTE: The default setting of Caller ID is FSK.

### SETTING AUTOSEND TIME

Similar to landline phone, the terminal automatically makes the call after short time the user finishes entering dial numbers. To change,

- 1. Pick up the handset.
- 2. Press <\*><\*><2><2>. Then press <3>~<9> or <0> and press<#>

For example, to set 5 seconds, press <\*><\*><2><2><5><#>.

**Note1:** 0 disables auto-send. If diabled, the user must press <#> to make a call. <#> functions as SEND key on the mobile phone. If auto-send time is 0, # as SEND feature is automatically enabled. **Note2:** Default auto send time is 3 seconds.

### Using # as SEND key

Similar to mobile phones, # key pressed after entering the dial numbers can act as SEND key. This feature can be enabled of disabled.

- 1. Pick up the handset.
- 2. Press <\*><\*><2><3><#> to enable the feature.
- 3. Press <\*><\*><2><3><\*> to disable the feature.

Note: Default setting is ON. If the Auto-Send Time is set as 0, the # as SEND is automatically enabled.

TX240G User Manual Ver. 0.2



### SETTING DTMF LENGTH

Some ARS (Automatic Response Service) require short or long DTMF tones depending on the system.

- 1. Pick up the handset.
- 2. Press <\*><\*><2><3><#> to select Short DTMF tone.
- 3. Press <\*><\*><2><3><\*> to select Long DTMF tone.

### **CHANGING LOCK CODE**

# The lock code prevents the terminal from being used by unauthorized person without permission. The default lock code is 0000

To change the lock code:

- 1. Pick up the handset.
- 2. Press <\*><\*><3><1>.
- Enter old 4 digits lock code. For example <0><0><0>. A short beep will sound as confirmation. If not correct, error tone will sound and the terminal returns to standby mode.
- Enter new 4 digits lock code followed by <#>. For example <1><2><3><4><#>. Another short beep sounds as confirmation.
- 5. Re-enter 4 digits lock code followed by <#>. For example <1><2><3><4><#>. Another beep sounds as confirmation. If not correct, error tone will sound and the terminal returns to standby mode.

For example, to change the lock code from 0000 to 1234, press

<\*><\*><3><1> .<0><0><0><0><<1><2><3><4><#> <1><2><3><4><#>.

### **RESTRICTING OUTGOING CALLS**

#### This feature can be used block outgoing calls from being made. Incoming call can be received.

- 1. Pick up the handset.
- 2. Press <\*><\*><3><2>.
- 3. Enter 4 digits lock code.
- 4. Press <#> to enable or <\*> to disable.
- Note 1: Default lock code is <0><0><0>. To change, refer to "Changing Lock Code"
- **Note 2:** If someone tries to make a call when outgoing call restriction is enabled, the terminal sounds beep and howler tone.





### FACTORY RESET

### Reset the user configuration to factory default settings

- 1. Pick up the handset.
- 2. Press <\*><\*><3><5>.
- Enter 4 digit lock code. If not correct, error tone will sound and the terminal returns standby mode.
- 4. Press <#> to reset.

Note 1: Default lock code is <0><0><0>. To change, refer to "Changing Lock Code"

**Note2:** Factory reset includes auto send time, lock code, call restrictions, caller ID type, voice privacy alert, connection alert and 1 minute alert.

## TTY/TDD

To use TTY/TDD feature, refer to following instruction. Default is OFF.

- 1. Connect the TTY/TDD phone to the terminal by RJ-11.
- 2. Lift the handset.
- 3. Press <\*><\*><5><1><0><#> for TTY Full Mode
- 4. Press <\*><\*><5><1><1><#> for TTY Talk Mode.
- 5. Press <\*><\*><5><1><2><#> for TTY Hear Mode.
- 6. Press <\*><\*><5><1><3><#>

Note: For the detailed instruction, contact your service provider.



# **Optional Features**

**CALL WAITING** 

**THREE-WAY CALLING** 

CALLER ID (Type I and II)

**VOICE MAIL SERVICE** 

**RJ11 CROSS ADAPTOR** 

## **CALL WAITING**

Call Waiting is a feature, which enables you to be alerted to a second incoming call while you are on the first call of your telephone. Your service provider may or may not provide this feature. Please inquire your service provider.

- 1. You will hear a beep from the earpiece when a second call is incoming.
- 2. Press the hook shortly or press FLASH key to answer to the second call.
- 3. Press the hook again or press FLASH key to return to the first call.

## THREE-WAY CALLING

Three-Way Calling is a feature that enables you to set up a three-way conversation

with two other users. Your service provider may or may not provide this feature. Please inquire your service provider.

- 1. Place a call.
- 2. Press the hook shortly or press FLASH key and place another call.

3. When the second call is answered, press the hook briefly or press FLASH key to start a three-way call.



### CALLER ID (Type I and II with CNAM - Network dependant feature)

To configure this feature, please refer to **Setting Caller ID** section in the Advanced Feature section Default is 32 bytes and Type II Caller ID allows you to see the Caller ID of second caller waiting. Alphanumeric caller ID will be supported if service provider's network supports this feature and you use alphanumeric caller ID supportable Landline phone.

## **VOICE MAIL SERVICE**

When you receive voice message(s), the Mode LED will blink in orange color. When you lift the receiver, voice message stutter tone is heard. Once your voice messages are checked and deleted, LED turns off after few seconds.voice mail feature may not be part of your service. Please check with your service provider.

### Accessing your Voice Mail service

Please check with your service provider for the access number.

### Clearing Voice Mail:

After calling the voice mail access number, please follow the instruction to set-up, listen and delete voice messages.

### RJ-11 CROSS ADAPTOR (Line 1 to Line 2 bypass adaptor)

If the first line (pin 2 and 3) of the phone line is live an has power, you may still be able to use the terminal through your house phone wiring by using a set of RJ-11 cross adaptor. Cross adaptor uses the Pin 1 and 3 of the RJ-11 cable. It must be used in pair or more, on each wall outlet. Depending on your house wiring, second line may not be available or bothe line 1 and line 2 are powered. In this case, do not connect the terminal to your home wall jack. Connect the POTS analog phone or cordless phone directly to the terminal.

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TX240G User Manual Ver. 0.2

Note1: Cross Adaptor may be called 2-line splitter and should be available from local electronic shops.







# Miscellaneous

MENU OPTION TABLE

TROUBLESHOOTING

SPECIFICATIONS



### MENU OPTION TABLE

MENU ("**00")	Sub Menu ITEM		EXAMPLE	
1.Sound	1. Adjusting Voice Volume	<*> Louder <#> Lower	<*><*><1><1><*> (louder) <*><*><1><1><*> (lower)	
	2. Adjusting Alert Volume	<*> Louder <#> Lower	<*><*><1><2><*> (louder) <*><*><1><2><#> (lower)	
	3. Setting 1 Minute Alert	<*> Off <#> On	<*><*><1><3><*> (off) <*><*><1><3><#> (on)	
	4. Voice Privacy Alert	<*> Off <#> On	<*><*><1><4><*> (off) <*><*><1><4><#> (on)	
	5. Connection Alert	<*> Off <#> On	<*><*><1><5><*> (off) <*><*><1><5><#> (on)	
2. General	1. Setting Caller ID	0: No Caller ID 1: DTMF Standard 2: FSK(Bellcore):Default	<*><*><2><1><0><#> (no caller id) <*><*><2><1><1><#> (DTMF) <*><*><2><1><2><#> (FSK)	
	2. Setting Auto Send time	3~9 seconds 0: OFF	<*><*><2><2><3><#> (3 seconds) <*><*><2><2><0><#> (off)	
	3. '#' as Send key	<*>Off <#> On	<*><*><2><3><*>(off) <*><2><3><#>(on)	
	4. Setting DTMF Length	<*>Long <#> Short	<*><*><2><4><*> (Long) <*><2><4><#> (Short)	
3. Security	1. Changing Lock code	Old lock code,(Tone), New lock code,(#), New lock code again,(#)	To change from "0000" to "1234" <*><*><3><1><0><0><0><0> (confirm tone) <1><2><3><4><#><1><2><3><4><#>	
	2. Restricting Outgoing Calls	Lock code + <*>Off or <#>On	If lock code is <0><0><0><0>, press <*><*><3><2><0><0><0><0><<*>(off) <*><*><3><2><0><0><0><0><4>(org) (org)	
	3. Factory Reset	Lock code, <#>	lf lock code is <0><0><0>: <*><*><3><5><0><0><0><4>	
4.TTY	1. TTY Mode Set	0 : TTY_FULL 1 : TTY_TALK 2 : TTY_HEAR 3 : TTY_OFF (Default)	<pre>&lt;*&gt;&lt;*&gt;&lt;4&gt;&lt;1&gt;&lt;0&gt;&lt;#&gt;: TTY_FULL &lt;*&gt;&lt;*&gt;&lt;4&gt;&lt;1&gt;&lt;1&gt;&lt;#&gt;: TTY_TALK &lt;*&gt;&lt;*&gt;&lt;4&gt;&lt;1&gt;&lt;1&gt;&lt;#&gt;: TTY_TALK &lt;*&gt;&lt;*&gt;&lt;4&gt;&lt;1&gt;&lt;2&gt;&lt;#&gt;: TTY_HEAR &lt;*&gt;&lt;*&gt;&lt;4&gt;&lt;1&gt;&lt;3&gt;&lt;#&gt;: TTY_Off</pre>	
5. A GPS Test Mode	1. Operation Mode	1 : Standalone 2 : MS-Based 3 : MS-Assisted	<pre>&lt;#&gt;&lt;#&gt;&lt;4&gt;&lt;7&gt;&lt;7&gt;&lt;7&gt;&lt;#&gt;&lt;1&gt;&lt;1&gt;&lt;#&gt;: Standalone &lt;#&gt;&lt;#&gt;&lt;4&gt;&lt;7&gt;&lt;7&gt;&lt;#&gt;&lt;1&gt;&lt;2&gt;&lt;#&gt;: MS-Based &lt;#&gt;&lt;4&gt;&lt;7&gt;&lt;7&gt;&lt;7&gt;&lt;#&gt;&lt;1&gt;&lt;3&gt;&lt;#&gt;: MS-Assisted</pre>	
	2. Get Position		<#><#><4><7><7><7><#><2><#>	
	3. Accuracy Threshold		<#><#><4><7><7><#><3><#>	



4. End Session		<#><#><4><7><7><7><#><4><#>
5. Set Session Type	1 : Set Single Session 2 : Set Tracking Session	<pre>&lt;#&gt;&lt;#&gt;&lt;4&gt;&lt;7&gt;&lt;7&gt;&lt;#&gt;&lt;5&gt;&lt;0&gt;&lt;#&gt; : Single Session &lt;#&gt;&lt;4&gt;&lt;7&gt;&lt;7&gt;&lt;#&gt;&lt;5&gt;&lt;1&gt;&lt;#&gt; : Tracking Session</pre>

### TROUBLESHOOTING

### Troubleshoot the conventional wired telephone

In the event you are unable to place or receive telephone calls, first be sure that the connection wire is properly connected to the RJ-11 phone port on the terminal and to the RJ-11 port of the telephone. If unsure whether or not the telephone is operational, connect a telephone, which is known to be operational to the terminal. If service is available with the operational telephone, replace or repair your telephone equipment. If service is still not available, then follow instructions under "Troubleshoot the Fixed Wireless Terminal".

### Troubleshoot the Fixed Wireless Terminal

Check for the appropriate power indication on the LED. If no power, check the adaptor (or External Power Supply) connection between the electrical outlet and the terminal. Check for the appropriate Received Signal Strength Indication (RSSI), Power, and Message Indication through the designated LED, respectively. TX240G User Manual Ver. 0.2



### **SPECIFICATIONS**

ltem	Description	Remark
Air Interface	CDMA20001x	
RF Frequency	800MHz/1900Mhz	Dual band
LED Indicator	3 multi color Power, Signal Mode	Green, Orange, Red, Off
Interface	<ul> <li>2 RJ-11 Ports, bridged (Max 5 REN)</li> <li>DC Input Jack</li> <li>Power ON/OFF Switch</li> <li>TNC Connector for CDMA antenna</li> <li>SMA Connector for GPS antenna</li> <li>RUIM(Optional)</li> </ul>	
Battery	<ul> <li>Li-ion rechargeable battery</li> <li>Capacity :1000mAh (Standard)</li> <li>* Stand by time: 7Hrs</li> <li>* Talk time:1Hr</li> </ul>	
Power Adapter	- Input: AC100-240V, 50/60Hz - Output:5V/2A	
Dimension	- Size: 165 X 117.5 X31 (mm) - Weight: 268g	With standard battery
Operating condition	- Temperatue: -10 ℃ ~ 50 ℃ - Relative humidity : 10~95% - Air pressure : 86~106kpa	

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# **Safety Information**

### 1 . SAFETY INFORMATION FOR FIXED WIRELESS TERMINALS .POTE NTIALLY EXPLOSIVE ATMOSPHERES

Turn your phone OFF when in any area with a potentially explosive atmosphere and obey all signs and instructions. Sparks in such areas could cauls e an explosion or fire resulting in bodily injury or even death.

### INTERFERENCE TO MEDICAL DIVICES

Certain electronic equipment may be shielded against RF signal from you wireless phone. (pacemakers, Hearing Aids, and so on) Turn your phone OFF in health c are facilities when any regulations posted in these areas instruct you to do so. RF signals may affect improperly installed or inadequately shielded electronic system in motor vehicles.

### **.EXPOSURE TO RF ENERGY**

Use only the supplied or an approved replacement antenna. Do not touch the antenna unnecessarily when the phone is in use. Do not move the antenna close to, or couching any exposed part of the body when making a call.

# SAR INFORMATION

# THIS MODEL PHONE MEETS THE GOVERNMENT'S REQUIREMENTS FOR EXPOSURE TO RADIO WAVES.

Your wireless phone is a radio transmitter and receiver. It is designed and manufactured not to exceed the emission limits for exposure to radiofrequency (RF) energy set by the Federal Communications Commission of the U.S. Government. These limits are part of comprehensive guidelines and establish permitted levels of RF energy for the general population. The guidelines are based on standards that were developed by independent scientific organizations through periodic and thorough evaluation of scientific studies. The standards include a substantial safety margin designed to assure the safety of all persons, regardless of age and health. The exposure standard for wireless mobile phones employs a unit of measurement known as the Specific Absorption Rate, or SAR. The SAR limit set by the FCC is 1.6 W/kg. \*

Tests for SAR are conducted with the phone transmitting at its highest certified power level in all tested frequency bands. Although the SAR is determined at the highest certified power level, the actual SAR level of the phone while operating can be well below the maximum value. This is because the phone is designed to operate at multiple power levels so as to use only the power required to reach the network. In general, the closer you are to a wireless base station antenna, the lower the power output. Before a phone model is available for sale to the public, it must be tested and certified to the FCC that it does not exceed the limit established by the government adopted requirement for safe exposure. The tests are performed in positions and locations (e.g., at the ear and worn on the body) as required by the FCC for each model. The highest SAR value for this model phone when tested for use at the ear is <u>1.33 W/Kg.</u> SAR information on this model phone is on file with the FCC and can be found under the Display Grant section of http://www.fcc.gov/ oet/fccid after searching on FCC ID: PH7TX240G.

Additional information on Specific Absorption Rates (SAR) can be found on the Cellular Telecommunications Industry Asso-ciation (CTIA) web-site at <u>http://www.wow-com.com</u>. \* In the United States and Canada, the SAR limit for mobile phones used by the public is 1.6 watts/kg (W/kg) averaged over one gram of tissue. The standard incorporates a sub-stantial margin of safety to give additional protection for the public and to account for any variations in measurements.

### Near Body operation

This device was tested for typical near body operations with the back of the phone kept 20 mm from the body. To maintain compliance with FCC RF exposure requirements, it must have a minimum distance including the antenna of 2 cm from the body during normal operation.

# U.S.A.

# U.S.FEDERAL COMMUNICATIONS COMMISSION RADIO FREQUENCY INTERFERENCE STATEMENT

# INFORMATION TO THE USER

NOTE : This equipment has been tested and found to comply with the limits for a Class B digital device pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful Interference in a residential installation This equipment generates, uses, and can radiate radio frequency energy and, if Not installed and used in accordance with the instructions, may cause harmful Interference to radio communications. However, there is no guarantee that interference will not occur in a particular Installation. If this equipment does cause harmful interference 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 receiving antenna.
- . Increase the separation between the equipment and receiver.
- \*- Connect the equipment into an outlet of a circuit different from that to which the receiver is connected.
- \*- Consult the dealer or an experienced radio/TV technician for assistance.

Changes or modification not expressly approved by the party responsible for Compliance could void the user's authority to operate the equipment. Connecting of peripherals requires the use of grounded shielded signal cables.

# **FCC Compliance Information**

This device complies with Part 15 of FCC Rules. Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference, and
- (2) This device must accept any interference received. Including interference that may cause undesired operation.

