

# USER MANUAL

TX241G

CDMA Fixed Wireless Voice Terminal



# **INTRODUCTION**

## **OVERVIEW**

The Axesstel TX241G is a dual-band (800/1900Mhz) fixed wireless voice terminal that is perfect for consumers searching for a seamless POTS (Plain Old Telephone Service) land-line replacement service. TX241G is designed to provide a simple, cost effective dial tone service at a home or business. The TX241G is powered by an AC adapter with a 1600mAh rechargeable battery backup to provide continued functionality in the event of a power outage. Its advanced Assisted GPS (AGPS) feature provides E911 service to accurately determine the location of the caller in case of an emergency. Axesstel's TX241G also allows the consumer to migrate from landline to cellular without losing any functionality of their regular home phone service.

## FEATURES

- CDMA2000 1x-Advanced Voice Services (backward compatible to IS-95 A/B)
- 800/1900 MHz Dual Band
- OMA-DM HFA Activation and FUMO Support
- AGPS for E911 Service Support
- TTY/TDD Telephone Support
- 5 Multiple LED Indicators (Power, Battery, Voicemail Waiting Indicator, Mode, CDMA)
- 2 RJ-11 Bridged Ports to Connect to POTS Phones
- Dial-Tone and DTMF Generation
- Call Waiting, Three-way Calling, Call Forwarding, and Hook Flash
- Call Restriction, Caller ID, and Call Waiting Caller ID
- Rechargeable 1600mAh Li-ion Backup Battery
- USB Diagnostic Port for Firmware Upgrades
- OTA(IS-683A)

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## **SAFETY PRECAUTIONS**

1. Avoid placing the terminal in a dusty location, or near a source of gas or fire.
2. Do not shake, hit or drop the terminal.
3. To clean the outside of the terminal, use only a soft, dry cloth, as chemicals such as 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.
7. Use only the AXESSTEL provided power adapter. Do not use the AXESSTEL power adapter for any other purpose.
8. Use only the AXESSTEL provided antenna. Do not use the antenna for any other purpose.
9. Frequency and length of use can affect the life of the self-charging battery. Contact your point of sale's customer service department if the battery is not operating properly.
10. Use only the designated self-charging battery. Dispose of exhausted batteries properly. Never discard a battery in or near a 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 power plug may vary from country to country.

**NOTE:** Use wired or cordless telephones compatible to FCC part 68 only. Non-compliant telephones may not work properly.

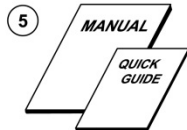
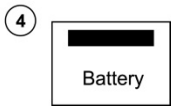
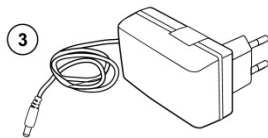
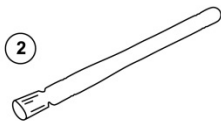
## PACKAGE CONTENTS

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 your service provider's support center.

- ① *Axesstel 1x-Advanced Fixed Wireless Terminal*
- ② *CDMA Dipole Antenna*
- ③ *Power Adapter (Input: AC100-240V, 50/60Hz / Output:5V/2A)*
- ④ *Backup Battery*
- ⑤ *User Manual and Quick Guide*
- ⑥ *RJ-11 Phone Cord*

### **CAUTION**

**Use only the power adapter provided. Using another power adapter may cause permanent damage to your terminal.**



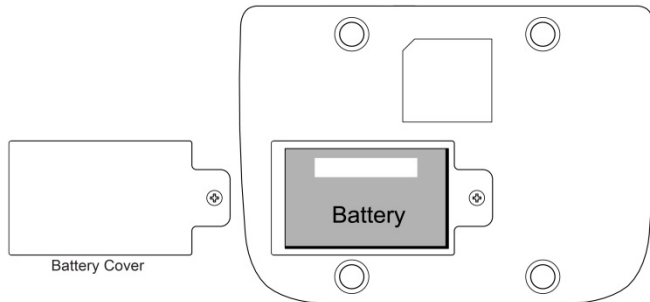


# BASIC INSTALLATION

## BATTERY INSTALLATION

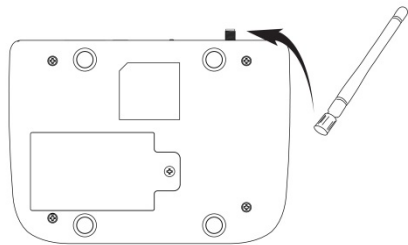
The TX241G operates on either AC current or its internal battery. However, you should use AC power whenever possible, reserving the battery for power outages.

1. Open the battery cover on the bottom of the device.
2. Insert the battery into the device.
3. Insert the battery pack in the right position with the battery terminals making contact with the device terminals.
4. Close the battery cover.



## SETTING UP THE DEVICE

1. Connect the antenna by screwing it into the connector on the back of the device.
2. Connect a wired or cordless telephone to the device using the supplied RJ-11 phone cord.
3. Plug the power adapter cable into the device.
4. Plug the power adapter into an AC power wall outlet.



**NOTE:** Use only wired or cordless telephones that conform to FCC part 68 requirements. Non-compliant telephones may not work properly.

**WARNING:** Do not connect this device to your telephone wall outlet. This configuration is not supported unless you have taken steps to disconnect existing landline wiring coming into your home or office.







## E911 INFORMATION



Your device features an embedded Global Positioning System (GPS) chip necessary for utilizing E911 emergency location services where available. During the emergency call, all the LEDs on the terminal will blink and your location can then be determined by the 911 operator.

**IMPORTANT:** Always report your location to the 911 operator when placing an emergency call. Some designated emergency call takers, known as Public Safety Answering Points (PSAPs) may not be equipped to receive GPS location information from your device.

# GETTING TO KNOW THE TERMINAL

## LED INDICATOR LIGHTS

Item	Color	Status	Description
POWER 	Green	Solid	On
	Off	-	Off
BATTERY 	Green	Solid	Battery is sole source, power above mid-voltage
	Green	Blinking	AC is sole source, battery charging
	Red	Solid	Battery is sole source, voltage low
	Red	Blinking	AC is sole source, no battery
CDMA 	Green	Solid	Camped on network
	Red	Solid	No CDMA coverage
MODE 	Green	Solid	Incoming call
	Red	Solid	Off-hook
	Off	-	On-hook

<b>VOICEMAIL</b> 	<b>Red</b>	Solid	Voicemail in the system
	<b>Off</b>	-	No new voicemail
<b>E911 Call</b> 	<b>All LEDs</b>	Blinking	All LEDs blink during emergency call

## AUDIO SIGNALS HEARD ON PHONE

No	Sound	Description	Remarks
1	Normal Dial Tone	Standard dial tone	Your device is working properly.
2	Voicemail Message Tone	Wavering beep	When you receive voice messages you will hear this tone. The Voicemail LED will be red. If you have a voicemail message waiting when you need to make a call, you need to wait for the dial tone before you can begin dialing.
3	No Service Tone	Extended beep	Your device is not working correctly.
4	Howler Tone	Fast beep	Your phone's handset is off-hook. Place the handset back on-hook to cancel this sound.

# Basic Operation

**POWER ON/OFF  
ACTIVATION  
SETTING UP YOUR VOICEMAIL  
MAKING CALLS  
ANSWERING CALLS  
DEFAULT RESET  
FACTORY RESET  
TTY/TDD-MODE SETTING**

## POWER ON / OFF

**The power button is located on the top of the terminal**

1. Plug the power adapter into an AC power wall outlet.
2. Plug the power adapter into the power connector on the back of the device.
3. Push the power button on top of the device for several seconds, then release. The green light will illuminate.
4. Turn device off by pushing power button on top of device for several seconds, then release. The green light will turn off.

## ACTIVATION

**To activate your TX241G using Over the Air Service Provisioning (if supported by your carrier):**

1. Turn on your device.
2. The device will begin its initiation process and start to acquire the network.
3. Wait 2 minutes to complete.
4. From your connected phone dial \*228 and follow the voice prompts to complete the activation.

**NOTE:** Check with your service provider before activation as your device may already be activated.



## SETTING UP YOUR VOICEMAIL

**You should set up your voicemail and personal greeting as soon as your device is activated. Always use a password to protect against unauthorized access. Please check with your service provider for the voicemail access number. Your device automatically transfers all unanswered calls to your voicemail, even if your device is in use or turned off.**

1. Dial your voicemail number (the phone number assigned to your phone).
2. Follow the prompts to:
  - Create your password
  - Record your name announcement
  - Record your greeting

## MAKING CALLS

1. Check if the device is turned on.
2. Lift the handset on any connected phone. You should hear a dial tone.
3. Dial a number as you usually would.
4. Wait for about 3 seconds while your device connects with the number you dialed.

**NOTE:** You can dial phone numbers with a maximum of 32 digits, including  and .

## ANSWERING CALLS

**When connected to your TX241G, your phone will ring exactly as if it were connected to a landline.**

1. Lift the handset on any connected phone to answer a call.

## DEFAULT RESET

**If you want to clear any changes you have made to your TX241G's settings and reset it to the default settings:**

1. Lift the handset on any connected phone.
2. Press
3. Enter the four-digit lock code (default is "1234").
4. Press  to reset. You will hear two short tones if successful or four short tones if the reset was unsuccessful.

## FACTORY RESET

**To reset your device to factory condition:**

1. Lift the handset on any connected phone.
2. Press
3. Enter the six-digit SPC default code (The default code is "000000").
4. You will hear two short tones if reset is successful or four short tones if the reset was unsuccessful.

## TTY/TDD-MODE SETTING

**Configure your device for TTY use. The default setting is OFF.**

1. Lift the handset on any connected TTY/TDD phone and choose one of the following options:

- Press       for TTY Full Mode.
- Press       for TTY Talk Mode.
- Press       for TTY Hear Mode.
- Press       to turn TTY off.

# Optional Features

**CALLER ID  
SETTING CALLER ID MODE  
CALL WAITING  
3-WAY CALLING**

## CALLER ID

**Caller ID allows people to identify a caller before answering the phone by displaying the number of the incoming call. If you do not want your number displayed when you make a call, follow these steps.**

1. Press \*67
2. Enter your phone number.

## SETTING CALLER ID MODE

**If the phone you have connected to your TX241G has an LCD display, the caller's number will appear by default. To change this setting:**

1. Lift the handset of any connected phone.
  - Press \* \* 2 1 0 # to disable the Caller ID feature.
  - Press \* \* 2 1 2 # to re-enable the Caller ID.

## CALL WAITING

**When you're on a call, Call Waiting alerts you to incoming calls. To use call waiting:**

1. When you hear a beep from the receiver on any connected phone during a call, it means a second caller is trying to connect.
2. Press the hook or the flash button (if present) to answer the second call.
3. Press the hook or the flash button again to return to the first call.

## 3-WAY CALLING

**With 3-Way Calling you can talk to two people at the same time. When using this feature, the normal airtime rates will be charged for each of the two calls. To use 3-way calling:**

1. Call the first party.
2. Place a second call by pressing the hook or the flash button (if present), enter the second party's number, and press the hook or flash button again to dial the number.
3. When you are connected to the second party, press the hook or flash button to start the 3-way call.

# Miscellaneous

**TROUBLESHOOTING  
SPECIFICATIONS  
SAFETY INFORMATION**

## **TROUBLESHOOTING**

### ***Problem: I Can't Place a Call***

1. Check the power button to make sure your device is getting power.
2. Check the antenna to make sure it is tightly connected.
3. Check the phone cord to make sure it is properly connected.
4. Try connecting the TX241G to a different telephone.
5. If you perform all of the above steps and still can't make a call, contact your service provider.

### ***Problem: I Can't Receive a Call***

1. Check the power button to make sure your device is getting power.
2. Check the antenna to make sure it is tightly connected.
3. Check the phone's handset to make sure it is seated properly on the cradle.
4. If you perform all of the above steps and still can't receive a call, contact your service provider.

### ***Problem: Voicemail Indicator Does Not Clear***

1. If the message light stays on but you have no messages waiting, call your number and leave a voicemail.
2. Hang up, access your voicemail, and delete the message you just left



### ***Problem: No Power***

1. Make sure the power adapter is securely connected to both the device and the electrical outlet.
2. Make sure a back-up battery is properly installed (see Battery Installation).
3. When using in battery-only mode, make sure the back-up battery is fully charged. To view the charge level, check the device's Battery LED (see LED Indicator Lights).
4. Make sure the power button is turned on. The power switch is located on the top of the device.

### ***Problem: No Signal***

Follow these steps if you don't hear a dial tone through the handset and the CDMA LED is not lit.

1. Make sure the telephone is working.
2. Check the power button to make sure your device is getting power.
3. Check the antenna to make sure it is tightly connected.
4. Next move the TX241G to another location in your home.
5. If after taking the above steps you still don't have a dial tone and the CDMA LED is off, contact your service provider.

## SPECIFICATIONS

Item	Description	Remark
Air Interface	CDMA2000 1X-Advanced	
RF Frequency	800MHz/1900Mhz	Dual band
LED Indicator	- 5 Multiple LEDs - POWER, BATTERY, VOICEMAIL WAITING INDICATOR, MODE, and CDMA	Green, Red, Off
Interface	- 2 RJ-11 Ports (bridged), Max 4 REN - DC power Jack - Power ON/OFF Button - TNC Connector for CDMA antenna with GPS antenna	
Special Feature	AGPS for E911 Service Automatic Sending Caller ID (DTMF, Bellcore)	

Tone	Dial, No Service, Howler, Stutter, Menu OK, Menu NOK	
Call feature	Hook Flash Call Waiting Call Forwarding 3-Way Calling	
Battery	- Li-ion rechargeable battery - Capacity :1600mAh (Standard) * Stand by time: 15 Hrs * Talk time:1.5 Hr	
Power Adapter	- Input: AC100-240V, 50/60Hz - Output:5V/ 2A	
Dimension	- Size: 174 X 128 X 34 (mm) - Weight: 226g	With standard battery
Operating Condition	- Operating Temperature: -25°C ~ +60°C - Operating Humidity : 0~95%	

## **SAFETY INFORMATION**

This device complies with Part 15 of the FCC Rules. Its 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.

Note: This product 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 product 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 product 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 on a circuit different from that to which the receiver is connected.
- Consult your dealer (service provider) or an experienced radio/TV technician for help.

**AXT STD V2.0**

**FCC Caution:** Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

**Radiation Exposure Statement:**

This device meets the government's requirements for exposure to radio waves. This device is designed and manufactured not to exceed the emission limits for exposure to radio frequency (RF) energy set by the Federal Communications Commission of the U.S. Government.

The exposure standard for wireless device employs a unit of measurement known as the Specific Absorption Rate, or SAR.

The SAR limit set by the FCC is 1.6W/kg. \*Tests for SAR are conducted using standard operating positions accepted by the FCC with the device transmitting at its highest certified power level in all tested frequency bands.

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