

# Marshall 8 User Manual Guide



## NOTICE

This user manual provides a summary of the basic product specifications and features. Before using each product, please read this user manual thoroughly. Pay special attention and adhere to the safety information throughout this manual.

Some instructions in this manual are based on the Android 11 operating platform. If you are using another operating system, some operations may differ.

Do not touch the LCD panel with sharp or hard objects. Do not use abrasive cleaners, waxes or solvents for cleaning, use only a dry or damp, soft cloth. Use only battery, power supply and accessories specified by the manufacturer.

Because of our continuous research and improvements, the contents in this catalogue may be changed without prior notice. The printed illustrations in this manual may differ from the actual product. The features and operations described in this guide are common to most, but not all, models.

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## General safety information:

Use the following safety guidelines to help protect your device from potential damage and to help to ensure your personal safety. Also adhere to and take note of any additional cautions and safety warnings throughout this manual.



**WARNING:** To reduce the risk of fire or electric shock, do not expose this device to extreme heat, rain or moisture. Make sure the power cord is UNPLUGGED from the wall outlet during lightning storms or when it will not be used for an extended period of time. Do not open the device or remove any internal parts. Contact qualified personnel if repairs are necessary. Follow all operating precautions when using this product.

### Operating Environment

Remember to follow any special regulations enforced in any area, and always switch your device off whenever it is forbidden to use it, or when it may cause interference or danger. Do not use your device in restricted areas. Switch your device off in any facility where posted notices require you to do so. When connecting the device or any accessory to another device, read the user's guide for detailed safety instructions. Do not connect incompatible products. Most modern electronic equipment is shielded from Radio Frequency (RF) signals. However, certain electronic equipment may not be shielded against the RF signals from your device. Consult the manufacturer to discuss alternatives.

### Cautions

Any changes or modifications to your Marshall 8 device not expressly approved in this document could void your warranty for this product and void your authority to operate this equipment. Although your Chameleon device is quite sturdy, it is a complex piece of equipment and can be broken. Avoid dropping, hitting, bending, or sitting on it. Keep your device away from liquids of any kind. Precipitation, humidity, and liquids contain minerals that will corrode electronic circuits.

### Other Important Safety Information

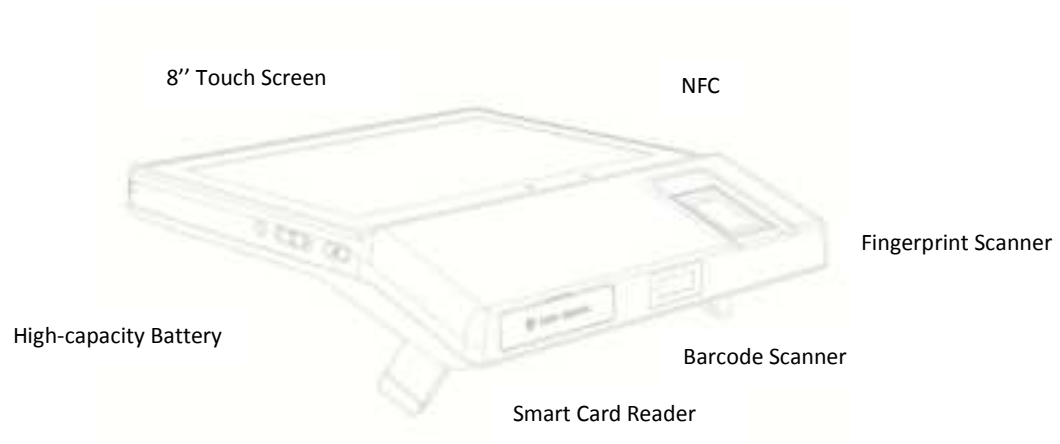
Only qualified personnel should service this device. Faulty service may be dangerous and may invalidate any warranty applicable to the device. When transporting the device in a moving vehicle ensure that any electronic devices or related equipment used in your vehicle are securely mounted. Switch your device off before boarding an aircraft. The use of wireless mobile devices in aircraft is illegal and may be dangerous to the aircraft's operation. Keep the device and all its parts out of reach of small children.

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# Main Function

- Fingerprint scanner
- Barcode scanner
- Smart card reader
- NFC contactless card reader
- 8" Touch screen
- High-capacity battery



## Specification

Key Parts	Specification
CPU	MTK8768 4xA53 2.0GHz & 4xA53 1.8GHz
OS	Android 11
RAM+ROM	DDR4, 3G+32G ( Optional 4G+64G, 6G+128G )
LCD	8-inches screen , 1280*800
Touch Panel	5-Point Touch
Camera (Rear)	Rear 13MP AF (option 8MP) + LED Flash
Camera (Front)	8MP FF (option 5MP)
Wi-Fi	IEEE 802.11 a/b/g/n/ac
Bluetooth	BT 5.0
2G	850&900&1800&1900
3G	B1&B2&&B4&B5&B8
4G	LTE FDD: B1/B2/B3/B4/B5/B7/B8/B12/B17/B20/B25/B26/B28/B66 LTE TDD: B38/B39/B40/B41
GPS	GPS + GLONASS + Galileo + Beidou
Battery	10000mAh
SIM Card	Micro SIM Card *2
PSAM Card	PSAM Card *1
Finger Print Reader	A700-M (Optional: A600-M)
Barcode Reader	1D, 2D, PDF417, QR code, Code 39, Code 128, DataMatrix, UPC-A, etc
Smart Card Reader	ISO 7816 Parts 1-3, Class A, B, C (5V, 3V, 1.8V), Support Micro Processor cards with T=0, T=1
NFC	ISO14443 A/B
USB	USB 2.0 type A*1, type C (OTG) *1
Charging	DC: 9V/2A
RTC	SUPPORT
Tamper protection	SUPPORT
Certificates	CE、FCC, ROHS
IP protection	IP65

# Introduction

Powerful. Portable. Packed with Features. The ARATEK Marshall 8 ushers in a new age in biometric identification and authentication. From fingerprint to facial recognition, barcode to contact and contactless card reading with tamper-protection, all the way to a large 8-inch display, ARATEK Marshall 8 integrates everything needed to get the job done. Extremely sturdy and portable, the IP65 rated ARATEK Marshall 8 enables users to securely manage enrollments in both indoor and outdoor environments and is suited for national ID, voter registration, SIM card activation, border control, law enforcement, financial services, mobile time attendance, and census campaigns. The ARATEK Marshall 8 has got everything covered.

## Key feature

- FAB 30 FBI-Approved Fingerprint Scanner
- Removable Long-Life Battery
- Mobile 4G, Wi-Fi, Bluetooth & GPS Connectivity
- NFC contactless card reader
- Contact Smart Card-Reader
- 1D/2D Barcode Scanner
- Android 11 OS
- Memory: 3GB RAM & 32GB ROM
- 8" Scratch Resistant Capacitive Touch Screen
- Dual SIM Ports
- TF card Port, PSAM card Port, Earphone jack port.

## Purpose of this user manual

This manual has been designed to introduce the user to the device features and components to be used as a step-by-step guide to achieve optimal device performance. The manual is intended to inform the user about proper operating procedures and provide relevant technical information related to the device.

## Warranty

The standard warranty period for the hardware and parts, as well as workmanship is 12 (twelve) months. Please visit <https://www.aratek.co/warranty-service/> to view our full, comprehensive warranty statement.

## Packaging

Marshall 8 device is neatly and securely packaged inside a custom EVA hard shell case. The custom EVA hard shell case is packaged inside a branded carton box, clearly marked with:

## Supplier details and regulatory information

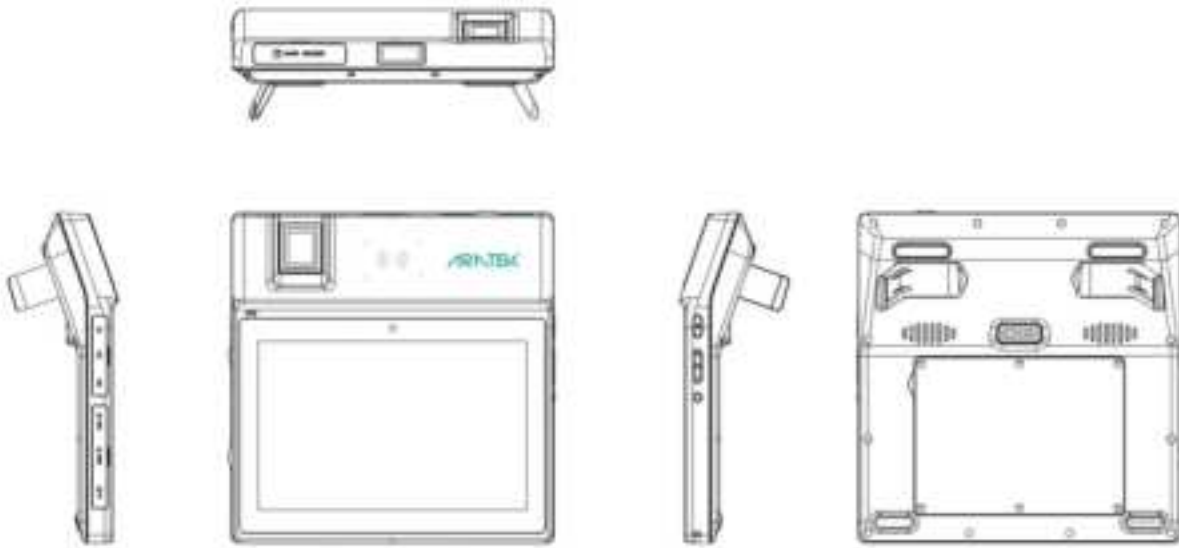
Unique barcode tracking & identification label

Each carton box will also be sealed with a security label



# Product details

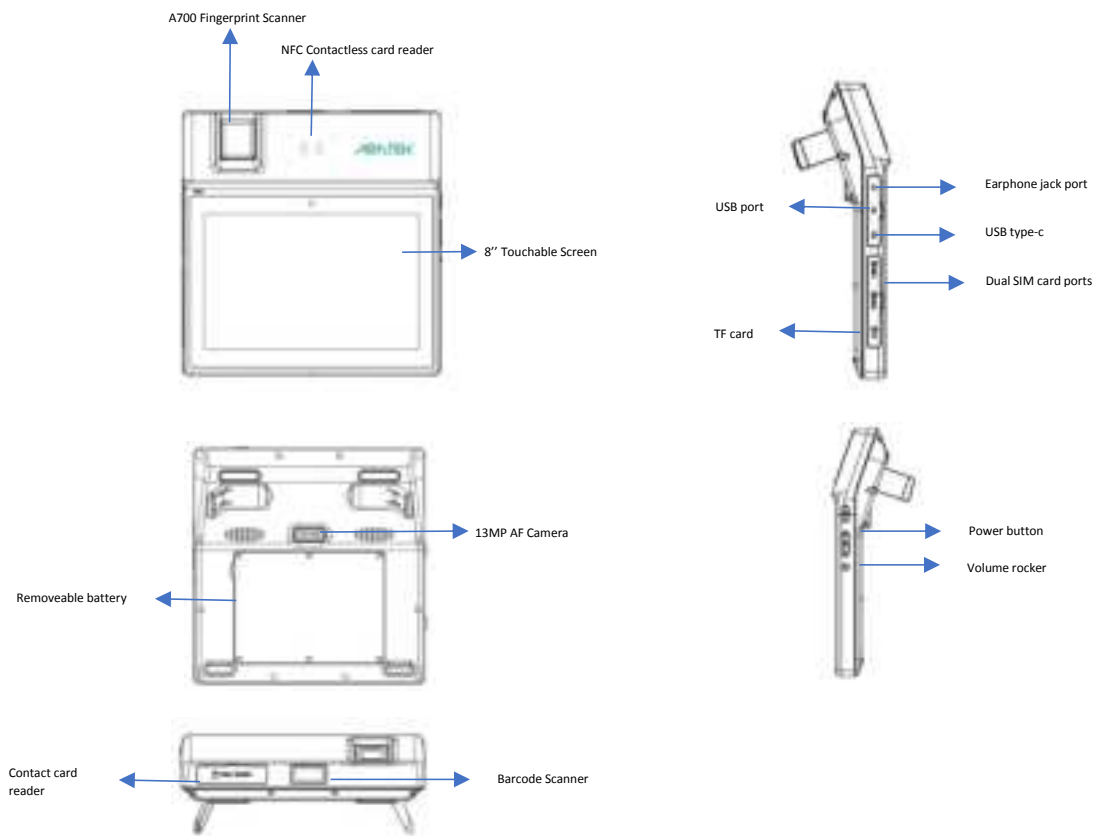
## Physical Characteristics:



■ Dimensions: 212.90mm x 208.05mm x 43.90 mm ■ Weight: 750g

# Product details continue

## Physical Characteristics:



## Battery install/remove



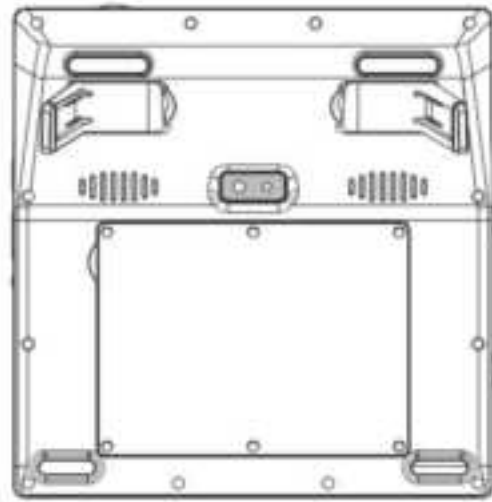
WARNING: Using an incompatible battery increases the risk of fire or explosion. Replace the battery only with a compatible battery purchased from the manufacturer. The battery is designed to work with your MARSHALL 8 device. Do not use a battery from any other device.



WARNING: Before removing or replacing the battery, turn off the device, disconnect the AC adapter from the electrical outlet and remove any other external cables from the device.



WARNING: Not for use in hazardous locations



Note: Loose the screws, then open the battery cover from the side.

## Battery information

### Conditioning a new battery

Before you use a battery pack for the first time, there is a conditioning process that you should follow:

1. Connect the AC adapter and fully charge the battery.
2. Turn on the device and complete setting up the operating system.
3. Disconnect the AC adapter.
4. Operate the device using battery power.
5. Reconnect the AC adapter and fully charge the battery again.
6. Follow these steps again until the battery has been charged and discharged three times.

*Use this conditioning process for all new batteries, or if a battery hasn't been used for a long time*

The battery conditioning process ensures your battery accepts the maximum possible charge. Failure to follow this procedure will prevent you from obtaining the maximum battery charge, and will also shorten the effective lifespan of the battery. In addition, the useful lifespan of the battery is adversely affected by the following usage patterns:

Using the device on constant AC power.

Not discharging and recharging the battery to its extremes, as described above.

Frequent use; the more you use the battery, the faster it will reach the end of its effective life.

### General battery safety information:

Only use the specified battery and power supply provided.

Use of any other batteries or power supplies may result in fire, or damage to the device, battery, or operator.

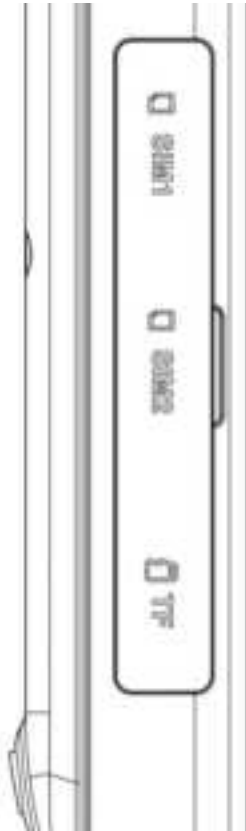
If the tablet is going to be stored for more than three months, remove the battery from the device to avoid battery damage or self-discharge.

Do not disassemble the battery pack. There are no user-serviceable parts inside. Doing so may present risk of exposure to harmful chemicals, explosion or fire.

Contact your local waste disposal service provider regarding the disposal or recycling of used batteries. Please adhere to local laws and regulations when it comes to recycling the battery.

## TF/ SIM/ PASM card installation

The SD/ SIM card panel can only be accessed with the left side ports under the interface plug. Open on the interface plug to insert cards to the device. The PASM card ports is under the battery.



- *Insert T-Flash card (micro SD) memory card into slot in correct orientation as shown above. The device can accommodate a TF card with memory of up to 128GB. A memory card can be installed at a later stage, it does not need to be purchased with the device.*
- *Insert the 2 x micro SIM (Subscriber Identity Module) cards into slots in correct orientation as shown above.*
- *Insert the 1 x PSAM (Purchase Security Application Module) cards into slots in correct orientation as shown above.*

## Earphone jack /USB/ MICRO USB

### Ear phone jack Port

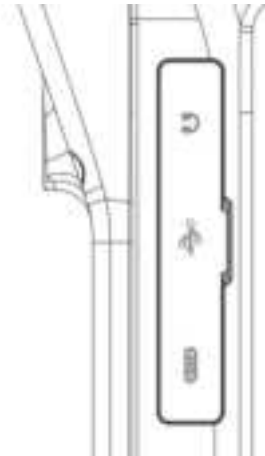
Ear phone jack port is allowed user insert headphone sets while listen the instructions doing the voting process.

### USB Port

USB Type-A is a specification that allows USB devices, such as tablets or, to act as a host, allowing other USB devices, such as USB flash drives, digital cameras, mice or keyboards, to be attached to them.

### MICRO USB

This MICRO USB port is a specification that allows Marshall 8 connected with laptop and another host device. To do data transfer, such as firmware upgrade, file transfer and more.



## **Power Button/Volume rocker/ Customize button**

### **Power Button**

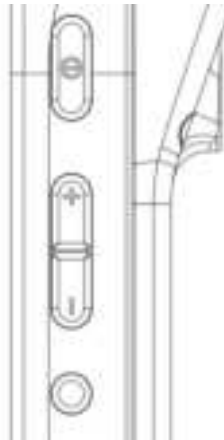
Power Button is allowed user to turn on and shut done the device.

### **Volume Rocker**

Volume button is allowed user to adjustment device volume from low to loud.

### **Customize button**

Customize button is allowed user to sets this button as a shortcut function button through Marshall 8's setting.



## IC Contact Card Reader Slot

While user looking at this device in the low right-side is the IC Contact Card Reader.

Always make sure that the smart chip on your card is facing you (visible to you) when you inserting to the slot.

Always inert smart chip side first (as indicated with arrow direction). See the picture below.

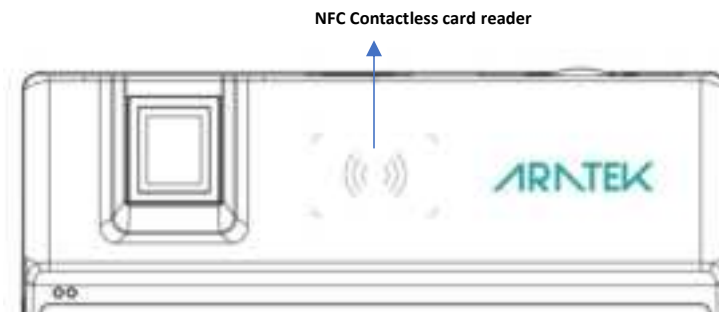


**Smart chip face up!**



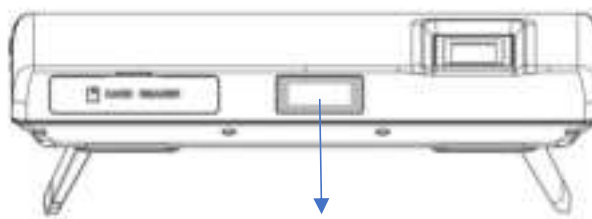
## NFC contactless card reader

Near field communication (also known as NFC) enables two electronic devices to communicate with each other. For example, an NFC card and a card reader will engage with each other, with a read range of around 4cm offering more flexibility in the field than a contact card. The NFC contact area is in the device upper center.



## Barcode Scanner

The barcode scanner is a sub-miniature area imager engine optimized for barcode reading. The engine captures digital images of a barcode for transmission to a decoder to decode a 1D or 2D barcode of any format supported by the decoding software. The scanner includes an LED illumination system. Please select your preferred image capture preferences and parameters.

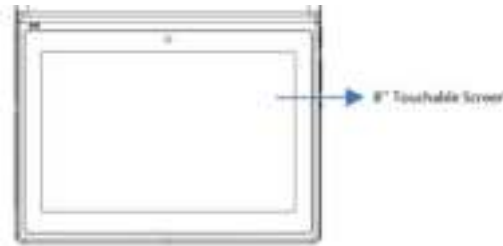


Barcode Scanner



## Touch Screen

The MARSHALL 8 display panel with high brightness and high contrast is visible under strong sunlight or outdoor environments. Avoid direct sunlight when possible to avoid overheating. Your tablet screen is tough and scratch resistant, but direct impact of sharp objects and abrasive materials could cause damage and leave marks. Always handle with care.



- *Keep your tablet display clean by using a soft, lint-free cloth. Use a damp microfiber cloth to take care of fingerprints, grime, and stubborn stains. Once all the stains are removed, wipe the screen again with a dry microfiber cloth. Always turn your device off before cleaning it. Never spray or drip cleaning liquid directly on screen. Never use harsh chemicals. Never use abrasive cloths or paper towels. Use a cotton swab to pick up dust and grime from the rim of your MARSHALL 8 screen.*

## Fingerprint Scanner

The BD1300 can accommodate a FAP20 or FAP30 optical fingerprint scanner. Each fingerprint scanner is FBI certified to ensure fast high quality image capture. The fingerprint sensor is software activated. Simply push down finger on the capture window. Do not use excessive force. Always keep the capture window clean.



## Cleaning device

Turn off your device. Disconnect any attached devices, headphones, speakers, and keyboard dock from the tablet and from their electrical outlets.

Use a soft microfiber cloth moistened with water or a non-alkaline detergent to wipe the exterior of the tablet. Do not allow water from the cloth to seep down to the tablet ports when doors are open.

Gently wipe the display with a soft, lint-free microfiber cloth. Do not use alcohol or detergent on the display.

### FCC Statement

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

(1) This device may not cause harmful interference.

(2) This device must accept any interference received, including interference that may cause undesired operation.

2. Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

#### 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 on a circuit different from that to which the receiver is connected.

Consult the dealer or an experienced radio/TV technician for help.

### SAR Information Statement

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 worn on the body, as described in this user guide, is **0.810W/Kg**(Body-worn measurements differ among phone models, depending upon available accessories and FCC requirements). While there may be differences between the SAR levels of various phones and at various positions, they all meet the government requirement for safe exposure. The FCC has granted an Equipment Authorization for this model phone with all reported SAR levels evaluated as in compliance with the FCC RF exposure guidelines. 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: **2AGUJM8** Additional information on Specific Absorption Rates (SAR) can be found on the Cellular Telecommunications Industry Association (CTIA) web-site at <http://www.wow-com.com>. \* 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 substantial margin of safety to give additional protection for the public and to account for any variations in measurements.

### **Body-worn Operation**

This device was tested for typical body-worn operations. To comply with RF exposure requirements, a minimum separation distance of **10mm** must be maintained between the user's body and the handset, including the antenna. Third-party belt-clips, holsters, and similar accessories used by this device should not contain any metallic components. Body-worn accessories that do not meet these requirements may not comply with RF exposure requirements and should be avoided. Use only the supplied or an approved antenna.