User Manual

Avvio L500

Table of Contents

A Message From Avvio

Thank you for purchasing your Avvio L500 mobile phone! Please follow these simple - but *important* - instructions for optimal use of your new phone:

Before using your phone for the first time, please carefully read this User Guide, especially the security information.

Note: Products or services of the vendor or carrier are subject to change within this User Guide without prior notice.

Application features and functions may vary among countries, regions or hardware specifications, and any third-party application malfunctions are the responsibility of those manufacturers.

Exercise caution when editing User Registration Settings as this may cause functional or compatability problems for which Avvio will not be responsible.

Most of all, we want you to thoroughly enjoy your new Avvio L500 phone and get the most out of all of its remarkable features!

Trademarks and copyrights [Need Avvio Legal rights verbage]

Attention: Pictures shown are for illustration only and do not represent actual devices.

Your Phone

3.5 mm audio jack

Proximity sensor

Receiver

Front camera

Volume keys

Power key

Home key

Menu key

Back key

Microphone

Micro USB port

Auxiliary microphone

Flash

Camera

Loudspeaker
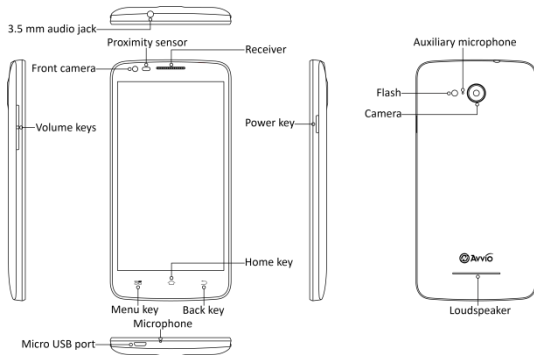
Functions of Keys

Keys	Functions
Menu key	Enable the menu pop-up.
Home key	Return to the Home screen from an app screen.
Back key	Return to the previous screen.
Volume keys	Adjust the volume of calls, ringtone, music and videos.
Power key	Press to turn off the backlight or re-activate the phone. Press and hold to turn on or off the power.

Note: Menu, Home and Back keys are touch keys.

Conventions used in this guide

■   This indicates some important tips of using the phones, such as what to do and what to avoid to keep good condition of the phone.

✓   This explores different functionalities of an app or a setting.

Note: This is a note or notification giving you additional information on phone operations.

1. Getting you started

Get off to a running start with your new Avvio L500

Charging the battery

1. Connect one end of the data cable to the
   USB/Power Port. This is located at the
   bottom of your phone.
2. Connect the other end to the travel adapter.
3. Connect the travel adapter to an electrical
   outlet to fully charge your phone.

   ■ Use the travel adapter that accompanies your phone; using other adapters may damage
   your phone.
   ■ Charging your phone through a USB cable that is attached to a laptop takes more time
   than charging it with the travel adapter.

Power phone on & off

- The Power key is located on the upper, right-hand side of your phone. Press and hold the Power key for a few seconds to turn on your phone.
- To turn off your phone, press and hold the Power key for the menu to pops up, and then select **Power Off**.

Touch screen & typing directions

1. Tap selected icon or other items in order to select or activate them.

2. To type a message, tap 😃 at the bottom of the Home screen and use the keypad that appears.

3. You can entering messages in either of the following ways:
   - Type letters one by one and choose the correct one as suggested.
   - Swipe between letters on the screen without pausing. Lift your finger when a new word or name is spelled.

Other touch tips

- ✓ Touch and hold an object on your phone screen without lifting your finger, you can then reorganize your apps layout or drag apps to the Home screen.
- ✓ To drag something, touch and hold an object without lifting your finger, then move your finger on the screen until you reach the desired spot.
- ✓ To zoom in/enlarge, double-tap on a screen object (such as Google Maps). Double-tap again to zoom out.
- ✓ Some apps allow you to zoom in or out with two fingers on the screen. That is, pinch your fingers to zoom out, or spread them apart to zoom in.

2. More basics

How your phone looks

1. Back key: Return to the previous screen.

2. Home key: Return to the Home screen.

3. Menu key: Show setting menus.

4. Close or open recent apps: Holding the Menu key opens a list of your recent apps. Tap an app to open it or remove an app from the list by swiping left or right.

5. Start Google search: Touch and hold the Home key to start Google search directly.

Screen-lock security options

1. To lock your phone, press the Power key (on the phone's right side) briefly, and let go.
2. To unlock, press Power key to turn on the screen, let go and slide the Padlock icon to the right.

Changing sound settings

On the Home screen, tap 🔲 > ⚙️ > **DEVICE** > **Sound** to change sound settings on your phone. You can adjust the volume by pressing volume keys on the left side of your phone.

Changing other settings

On the Home screen, tap 🔲 > ⚙️ > **DEVICE** > **Display** to change the brightness or font size settings and customize the wallpaper on your phone.

Taking screenshots

1. Focus on the image so it displays on your phone screen.
2. Press the Power key and Volume Down key at the same time.
3. The image will be auto-saved in Gallery.

3. Phone apps made simple

Making a call

On the Home screen, tap 🔘 > 📞 to enter Phone screen.

- ▨ Touch ⦂ to enter the keypad, and dial a number to call it.
- ▨ Tap 🕐 to display your recent calls and tap 📞 to return the call.
- ▨ Tap 👥 to display your contacts and tap one to call it.
- ▨ During a call, you can tap ☎ at the bottom of the screen to hang up.
- ▨ Calls can also be made from other widgets or apps that contain your contact information, by simply tapping the phone number.

Answering & redirecting calls

1. The Incoming Call screen pops up when a call comes in, along with the caller ID and other information you've entered in your Contact Book.
2. Any missed calls are logged in the Call log, along with a notification.
3. Press the Volume Down key on the left side of your phone to mute the ringer.
4. There are various options for when a call comes in. To answer a call, slide 📞 over to the answering key on the right.

You may:

- ✓ Start talking to the caller.
- ✓ Send to voicemail.
- ✓ Send a message by opening quick text responses and select one of them.

Note: To modify these standard text responses, tap ⚏ > **Settings** > **Quick responses**.

Exploring the call log

- The Call log contains your history of calls received, missed or made.
- Tapping the number will reveal more information about the call.

- Tapping 📞 beside the number returns the call.

- In the call details screen, tap ▭ to send a text message.

- Tap 👤 for contact information.

- Tap 👤₊ to add a new contact.

- To clear call logs, tap ▦ > **Clear call log**.

4. Texting & keyboard use

Entering & editing text
Enter text by using the screen's keyboard. To open your phone's
keyboard, simply tap where you want to type.

■   Otherwise, some apps will open the keyboard for you.

■   To close the keyboard, tap ⬑ below the keyboard.

Next-word suggestions
1. Tap where you want to type text.
2. Begin typing a word. Choose one of the words displayed above
    the keyboard.
3. If you do not want to use those words, type the next word
    without using the space bar.
4. Your phone will continue to   present word choices while you type.
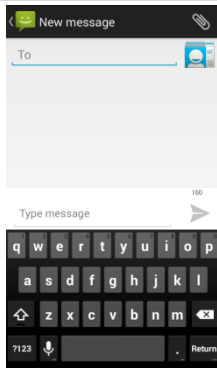
5. Customizing & using your Avvio L500 phone apps

Customizing your Home screen

1. Go to the Home screen where you want to position an app.
2. Tap .
3. Swipe right to locate an app or widget icon, and hold it until the Home screen comes up.
4. After sliding the icon into place, lift your finger.
   ✓ To reposition an app or widget icon on the Home screen, touch and hold the icon, and then move it to a new position.
   ✓ To move an app or widget icon to another screen, hold and swipe it toward the edge of the current screen. After the icon reaches the other screen, move it to a new spot and lift your finger.

People

■   The **People** app easily saves all of your important contact information including contact names, numbers and email addresses.

■   It also supports lots of other communication operations.

■   To search for your contacts, tap 🔍 at the lower left corner of the People screen, enter keywords in the search box. The phone system will automatically display the matched results.

■   To add a new contact, tap 👤₊ at the lower right corner of the People screen and select a storage location.

■   Enter the contact information and tap **DONE** to save it.

Setting up & using Gmail

1. The **Gmail** app allows you to read and compose emails.

2. On the Home screen, tap [icon] > [icon] to enter the Gmail screen. Here Gmail has various uses. For instance, utilize your Gmail account for signing in to all Google apps & services that include but are not limited to:
   ✓ Google Play Music
   ✓ Google Play Store
   ✓ Google Drive

Getting familiar with your Email app

1. On the Home screen, tap [icon] > [icon] to enter the Email screen. When using it for the first time, you need to enter your email address and password to configure an account.

2. After your email account is configured, you can archive, delete, label, or perform other mail operations.

3. Tap the icon on the left of a mail thread to select it.
4. After opening a mail, swipe left or right to read earlier or later mail conversations.
5. Tap at the top of your phone screen to manage your mails.
6. On the Email screen, you can tap > **Settings** to add a new email account.
7. On the Email settings screen, tap an email account and customize your Email settings.

Controlling your calendar

On the Home screen, tap > to enter Calendar screen.

- [ ] If you have synced your Gmail account, the first time you open the Calendar app on your phone, it will show your current calendar events.
- [ ] To modify the Calendar view, choose **Day**, **Week**, **Month** or **Agenda** by tapping on date at the top left of the Calendar screen.
- [ ] View event details by tapping an Event.
- [ ] Tap a blank square on the Calendar screen and tap that shows up to add a new event; or tap an existing event to edit it in a new window.
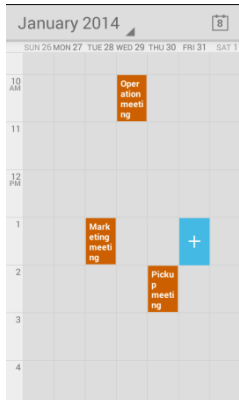
Operating the alarm

On the Home screen, tap 　 > 　 to enter Clock screen. Then, tap 　 to switch to the Alarm tab.

- ■   Tap 　 and the time displayed to set your alarm.
- ■   Once your alarm is set, you may add a label to it.
- ■   Select the **VIBRATE** check box and choose your ringtone from the **Ringtones** drop-down list.

Managing your downloads

On the Home screen, tap ![icon] > ![icon] to enter Downloads screen.

- █ You can download files from Gmail or other areas.
- █ On the Downloads screen, tap an item to open it.

- █ Touch and hold an item and tap ![share icon] that appears. In the **Share via** drop-down list, select a sharing method to share it.

- █ Touch and hold an item and tap ![delete icon] that appears to delete it.

- █ Tap ![icon] > **By name**, **By date modified**, or **By size** to sort the downloaded items.

6. Phone set-up and phone management

Privacy settings & accounts

Perform either of the following operations:

- On the Home screen, tap 🔘 > 🔅 to enter Settings screen. Then, choose **ACCOUNTS** > **Google** > **Search > Accounts & privacy**.

- On the Home screen, tap 🔳 > **System Settings** > **ACCOUNTS** > **Google** > **Search** > **Accounts & privacy**.

These settings control your phone's Google Search privacy features and search-related confidentiality selections for your Google account.

Managing location settings

On the Home screen, tap 📱 > ⚙️ to enter Settings screen. Then, choose **PERSONAL** > **Location**.

On the Location screen, you can perform the following operations:

- ✓ Turn on or off the location service.
- ✓ Set **Location mode** to **High accuracy**, **Battery saving**, or **Deivce only**.
- ✓ View recent location requests
- ✓ Perform Google Location Reporting settings.

Managing sound settings

On the Home screen, tap 📱 > ⚙️ to enter Settings screen. Then, choose **DEVICE** > **Sound**.

- ◼ Tap **Volumes**. Swipe the slider of volume levels for sources, such as music, ringtone, or alarms. Alternatively, press the Volume Up or Down keys on the left side of your phone.
- ◼ Tap **Phone ringtone**. Choose a desired ringtone for your phone. You can select **Vibrate**

when ringing to enhance notifying effects.

Managing screen settings

On the Home screen, tap ![icon] > ![icon] to enter Settings screen. Then, choose **DEVICE** > **Display** > **Brightness**.

Managing sleep settings

On the Home screen, tap ![icon] > ![icon] to enter Settings screen. Then, choose **DEVICE** > **Display** > **Sleep**. You can tap one of the options to select.

Notifications

- On top left of your phone, status icons will pop up displaying which apps have sent you notifications.
- For finding notifications, pull the notification shade down from the top.

■   Tap [icon] to view your settings for Bluetooth, Wi-Fi, etc.

Airplane mode

On the Home screen, tap [icon] > [icon] to enter Settings screen. Then, choose **WIRELESS & NETWORKS** > **More…** > **Airplane Mode**.

This mode is ideal for in-flight phone status, where no signal or Wi-Fi is connected.

You can also control this by scrollding down the status bar and click [icon].

7. Wireless network settings

Turning on Wi-Fi

1. On the Home screen, tap 🔲 > ⚙️ to enter Settings screen. Then, choose **WIRELESS & NETWORKS** > **Wi-Fi** to turn Wi-Fi on/off.

    Note: If having been connected to a Wi-Fi network, your phone will be auto-connected once locating it.

2. Swipe the Wi-Fi switch to ON for enabling your phone to scan for available Wi-Fi networks. It will show the networks.
3. Tap the name of a desired network to connect, entering your password if necessary.

Changing network settings

Touch and hold the name of a connected network to change the network's settings.

Adding a Wi-Fi network

1. A Wi-Fi network may be added so that your phone will recognize it along with any of its security credentials, and then it will auto-connect.
2. Always add a Wi-Fi network if the network name is not transmitted (SSID), or when you are out of range.
3. Tap ➕ at the bottom right of the Wi-Fi settings screen.
4. Enter the SSID network name and select the correct security mode.
5. Tap **Save**. Your phone will auto-connect to this network whenever you return to its coverage.

Setting advanced Wi-Fi options

On Wi-Fi settings screen, tap ▨▨ > **Advanced**.

■   You will receive Wi-Fi notifications for available networks in your status bar by default. To disregard notifications, clear the **Network notification** check box.

■   To save your phone's data usage, your phone will remain connected to Wi-Fi when your screen sleeps.

8. Bluetooth settings

Bluetooth has the capacity to connect several mobile devices at once, enabling superior synchronization while reversing challenges and problems that would otherwise occur. Use Bluetooth to maximize awesome phone capabilities and functions of your Avvio L500.

Turning Bluetooth on/off

On the Home screen, tap [icon] > [icon] to enter Settings screen. Then, choose **WIRELESS & NETWORKS** > **Bluetooth** to turn Bluetooth on/off.

Changing your phone's Bluetooth name

Your phone contains a random Bluetooth name which will be visible to other Bluetooth devices during connection attempts. You can change the random name to a more identifiable one.

1. On the Home screen, tap [icon] > [icon] to enter Settings screen. Then, choose **WIRELESS &**

NETWORKS > **Bluetooth** to turn Bluetooth on.

2. Tap **Bluetooth**.

3. On the Bluetooth settings screen, tap [icon] > **Rename phone**.

4. Enter a new name and tap **Rename**.

Pairing your phone with a Bluetooth device

When initially using a new Bluetooth device, it will be necessary to pair it with your phone, which is crucial in order to connect.

Now both devices save the connected record and will auto-connect for you next time.

If the device to pair with isn't contained in the list, ensure that it is turned on and that it is set to be detectable.

1. On the Home screen, tap [icon] > [icon] to enter Settings screen. Then, choose **WIRELESS & NETWORKS** > **Bluetooth** to turn Bluetooth on.

2. Tap **Bluetooth**. Your phone will begin searching for nearby Bluetooth devices.

3. If your phone stops scanning before your Bluetooth device is ready, tap **SEARCH FOR DEVICES**.
4. Within the list, tap the ID of the Bluetooth device so as to pair with it. Follow the instructions to complete the pairing.
5. If necessary, enter a regular passcode such as **0000** or **1234**. Likewise, consult the documentation that came with the device.

Connecting to a Bluetooth device

Now that your phone is paired with a Bluetooth device, they can be connected manually.

1. On the Home screen, tap 🔲 > 🔘 to enter Settings screen. Then, choose **WIRELESS & NETWORKS** > **Bluetooth** to turn Bluetooth on.
2. Within the devices list, tap a paired and unconnected device.
3. The list will indicate that the device and the phone are connected.

Unpairing or aligning a Bluetooth device

Some Bluetooth devices have multiple profiles. Profiles can include the ability to transmit your conversations, play music in stereo, or transfer files or other data.

You can select which profiles you want to use with your phone. You can also change the name of the Bluetooth device as it appears on your phone.

1. On the Home screen, tap > to enter Settings screen. Then, choose **WIRELESS & NETWORKS** > **Bluetooth** to turn Bluetooth on.

2. On the Bluetooth settings screen, tap next to the connected Bluetooth device which you are configuring.

3. Check the choices offered, such as to change the name, to unpair it or to select profiles.

4. When settings are complete, tap to return to the previous screen.

Monitoring your phone's data usage

Although subject to your device and wireless plan, extra fees may be incurred when your data usage

surpasses your plan's limit.

Therefore, it is imperative to monitor the data you've uploaded or downloaded on to your phone.

To manage data usage and set mobile date limit, perform the following operations:

On the Home screen, tap > to enter Settings screen. Then, choose **WIRELESS & NETWORKS** > **Data usage**.

9. Creating & sharing videos and pictures

Creating a video

1. On the Home screen, tap 🔘 > 📷 to enter Camera screen.

2. Tap the icon on the lower left of the screen to expand the list and select 🎥.

3. Tap 🔴 while using the screen in order to see your video being recorded.

4. Tap ⏹ to stop recording.

Taking a photo

1. On the Home screen, tap 🔘 > 📷 to enter Camera screen.

2. Tap the icon on the lower left of the screen to expand the list and select 📷.

3. Focus on your subject by looking through your phone screen.

4. Tap to take a picture.

Sharing a video or photo

1. On the Home screen, tap > to enter Gallery screen.

2. Select a video or photo and tap .

3. From the drop-down list, select your desired sharing method.

It really is that easy! Your new Avvio L500 *makes it that way.*

10. Data usage settings

Manage your data usage settings

Here data usage settings for your new Avvio L500 are described, but they are carrier-specific.
The following instructions will assist in tracing data usage, which may help avoid possible additional charges.

Note: Be sure to check with your carrier for further information.

1. On the Home screen, tap 🔘 > 🔘 to enter Settings screen. Then, choose **WIRELESS & NETWORKS** > **Data usage** and switch **Mobile data** to **ON**.
2. Here you will see a graph. The vertical white lines present a time period within the data usage phase.
3. Touch and drag the white lines in order to change a data usage time period.

4. Your actual data usage is shown below the graph.

Setting a data usage limit warning
Touch the orange line on its right side and drag it to the point where you wish to receive a data usage warning notification.

Setting your data usage limits

1. On the Home screen, tap 🔘 > 🔘 to enter Settings screen. Then, choose **WIRELESS & NETWORKS** > **Data usage** and switch **Mobile data** to **ON**.
2. Activate the red line at the top of the graph by selecting the **Set mobile data limit** check box.
3. Touch the red line on its right side and drag it to the point where you wish to set the limit. Your data will automatically switch off when your usage limit has been reached.

11. Google Play Store

Google Play Store is all-in-one entertainment point with music, movies, books and apps on the web.

Accessing Play Store

1. On the Home screen, tap ![icon] > ![icon] to enter Google Play Store screen.
2. Swipe right from the left edge of the screen for the menu to pop up. This menu displays your content for that part of Google Play.
3. Your Google Play content can be retrieved this way (from the Play Store app) even if you access it through another phone.
4. Sign in to **play.google.com** to access your entertainment from any location.

Google Play settings

1. On the Google Play Store screen, tap [icon] > **Settings** to change your Google Play settings.
2. The Google Play settings screen enables you to:
   - ✓ Control game & app updates' notifications.
   - ✓ Set auto updates for apps and widgets.
   - ✓ Clear search history.
   - ✓ Manage user controls.

12. USB file transfers

- With a USB cable, you can transfer pictures, music, and other data files between your Avvio L500 phone and your computer.
- For transferring files to Mac OS X, the Android File Transfer application can be utilized. (Refer to instructions below.)
- You can use a shielded USB cable connecting with PC for data communication.

Windows transfer
1. Connect your phone to the computer's USB port. Its USB storage drive will appear on the computer screen.
2. Begin copying files between your phone and the computer.
3. When transfer is complete, eject the phone from Windows before unplugging the USB cable.

Mac OS transfer

1. Install Android File Transfer from **http://www.android.com/filetransfer** and follow the directions. Double-click for first-time use. (Auto-connect will occur thereafter.)
2. Connect your phone to the computer using a USB cable.
3. The Android File Transfer will begin, including a window pop-up showing your phone contents & other pertinent information.
4. Here you can open or close folders, create new folders, and drag files.
5. Disconnect the USB cable upon completion.

13. Optimizing your phone's battery life

Battery settings

Prolong your phone battery life by shutting down apps not in use or not required.

On the Home screen, tap > to enter Settings screen. Then, choose **DEVICE** > **Battery**. Here you may monitor how apps, other data and your phone system all consume battery power. The following are some suggestions for prolonging the battery life of your phone:

- Turn off **Wi-Fi**, **Bluetooth**, or **GPS** with the **Settings** app.

- On the Home screen, tap > to enter Settings screen. Then, choose **PERSONAL** > **Location** to access GPS settings.

- Turn off **Navigation** or **Maps** when not in use.

- Dim your phone's screen brightness: > > **DEVICE** > **Display**.

- Consider turning off auto-sync for all apps: > > **ACCOUNTS** > **Google**.

Note: If auto-sync is turned off, you must manually sync to check emails, and related notifications will no longer pop up.

■ Assess battery level and usage: > > **DEVICE** > **Battery**.
  • Battery usage for each app is displayed near the bottom of your phone screen.

Note: If you stop some apps or services completely, your phone may not operate properly.
The battery status & battery levels are indicated at the top of your phone screen.

  • Get more details by tapping an app. For some apps, you may modify power usage settings, or halt the app entirely.

14. Avvio L500 specs & hardware

Specifications

Dimensions	141.9 mm x 71.4 mm x 9.9 mm
Form Factor	Bar, Touchscreen
Antenna	Built-in
SIM Card	Micro SIM
Network Mode	GSM+WCDMA+LTE
Camera	Front camera: 2.0 MP; Rear camera: 8.0 MP AF
Earphone Jack	CTIA Standard earphone jack

Screen Parameters

Type	Dimensions	Resolution
FWVGA	5 inches	854x480

Accessories

Battery	Battery Type	Lithium Ion Polymer Rechargeable Battery
	Rated Capacity	2200 mAh
	Nominal Voltage	3.7 V

Prompt: The battery capacity changes with battery upgrade.

List of In-Box Contents

No.	Name	Quantity
1	Phone	1
2	Battery	1
3	Travel Charger	1
4	USB Charger Data Line	1
5	Headset	1
6	Warranty Card	1
7	Quick Start Guide	1

Prompt: The accessory items are as per the final transaction. Please contact the dealer for further details.

Declaration of Hazardous Substances

Parts Name	Toxic or hazardous substances or elements					
	Plumbum (Pb)	Mercury (Hg)	Cadmium (Cd)	Chromium VI (Cr(VI))	Polybrominated Biphenyls (PBB)	Polybrominated Diphenyl Ethers (PBDE)
PCB Board and Accessories	×	○	○	○	○	○
Plastics	○	○	○	○	○	○
Metals	×	○	○	○	○	○
Battery	×	○	○	○	○	○
Other	×	○	○	○	○	○
○: indicates that the content of the toxic or hazardous substance in all homogeneous materials is within the limit of the SJ/T11363-2006 standard.						

×: indicates that the content of the toxic or hazardous substance in some homogeneous materials exceeds the limit of the SJ/T11363-2006 standard.

The Environmentally Friendly Use Period of this product is 20 years, as shown by the symbol on the left. The Environmentally Friendly Use Period of replaceable parts, such as battery, may be different from that of the product. The Environmentally Friendly Use Period is valid only when the product is operated under the conditions defined in this User Guide.

IMPORTANT HEALTH INFORMATION AND SAFETY PRECAUTIONS

When using this product, the safety precautions below must be taken to avoid possible legal liabilities and damages. Retain and follow all product safety and operating instructions.

Observe all warnings in the product operating instructions. To reduce the risk of bodily injury, electric shock, fire and damage to the equipment, closely observe the all of the following precautions.

SAFETY PRECAUTIONS FOR PROPER GROUNDING INSTALLATION

CAUTION: Connecting to improperly grounded equipment can result in an electric shock to either you or your device. This product is equipped with a USB Cable for connecting to a desktop or notebook computer. Be sure your computer is properly grounded before connecting this product to the computer. The power supply cord of a desktop or notebook computer has an equipment-grounding conductor and a grounding plug. The grounding plug must be plugged into an appropriate outlet which is properly installed and grounded in accordance with all local codes and ordinances.

SAFETY PRECAUTIONS FOR POWER SUPPLY UNIT

Use the correct external power source. A product should be operated only from the type of power source indicated on the electrical ratings label. If you are not sure of the type of power source required, consult your authorized service provider or local power company.

For a product that operates from battery power or other sources, refer to the operating instructions that are included with the product.

ELECTRICAL SAFETY

This product is intended for use when supplied with power from the designated battery or power supply unit. Other usage may be dangerous and will invalidate any approval given to this product. **Handle battery packs carefully.** This product contains a Li-ion battery. There is a risk of fire and burns if the battery pack is handled improperly. Do not attempt to open or service the battery pack. Do not disassemble, crush, puncture, short external contacts or circuits, dispose of in fire or water, or expose a battery pack to temperatures higher than 60°C (140°F).

NOTE: Danger of explosion if battery is incorrectly replaced. Replace only with specified batteries. Recycle or dispose of used batteries according to all applicable local regulations, or in accordance with the instructions in the reference guide.

Follow these other specific precautions:

1.   Keep the battery or device dry and away from water or any liquid as it may cause a short circuit.

2.   The phone should be connected only to products that bear the USB-IF logo or have completed the USB-IF compliance program.

3.   Keep metal objects away so they don't come in contact with the battery or its connectors as it may lead to short circuit during operation.

4.   Always keep the battery out of the reach of babies and small children to avoid swallowing. Consult a doctor immediately if the

battery is swallowed.

5.   Do not use a battery that appears damaged, deformed, discolored, has any rust on its casing, if it overheats, and/or if it emits a foul odor.

6.   Use of an unqualified battery or charger may present a risk of fire, explosion, leakage or other hazard.

7.   Only use the battery with a charging system that has been qualified with the system per this standard: IEEE-Std-1725-200x.

8.   Use of an unqualified battery may present a risk of fire, explosion, leakage or other hazard.

9.   Replace the battery only with another battery that has been qualified with the system per this standard: IEEE-Std-1725-200x.

10. Avoid dropping the phone or battery. If the phone or battery is dropped, especially on a hard surface causing damage, take it to a service center for inspection.

11. If the battery leaks: Do not allow the leaking fluid to come in contact with eyes. If contact occurs, DO NOT rub the eyes.   Rinse with clean water immediately and seek medical advice. Do not allow the leaking fluid to come in contact with skin or clothing. If contact occurs, flush the affected area immediately with clean water and seek medical advice. Take other precautions to keep a leaking battery away from fire as there is a danger of ignition or explosion.

PREVENTION OF HEARING LOSS

CAUTION: Permanent hearing loss may occur if earphones or headphones are used at high-volume levels for prolonged periods of time.

SAFETY PRECAUTIONS FOR DIRECT SUNLIGHT

Store this product away from excessive moisture and extreme temperatures. Do not leave the product or its battery inside a vehicle or in places where the temperature may exceed 60°C (140°F), such as on a car dashboard, window sill, or behind glass that is exposed to direct sunlight or strong ultraviolet light for extended periods of time. This may damage the product, overheat the battery, or pose a risk to the vehicle.

ENVIRONMENTAL RESTRICTIONS

Do not use this product in gas stations, fuel depots, chemical plants or where blasting operations are in progress, or in potentially explosive atmospheres such as fueling areas, fuel storehouses, below deck on boats, chemical plants, fuel or chemical transfer or storage facilities, and areas where the air contains chemicals or particles, such as grain, dust, or metal powders. Please be aware that sparks in such areas could cause an explosion or fire resulting in bodily injury or even death.

AIRCRAFT SAFETY

Due to the possible interference caused by this product to an aircraft's navigation system and its communications network, using this device's phone function on board an airplane is prohibited in most countries. If flight personnel authorize use of electronic devices, switch device to Airplane Mode (consult User Guide for instructions) to turn off RF functions that may cause interference.

ROAD SAFETY

In many jurisdictions, vehicle operators are not permitted to use communication services with handheld devices while the vehicle is in motion, except in the case of emergency. In some countries, using hands-free devices as an alternative is allowed.

SAFETY PRECAUTIONS FOR RF EXPOSURE

1. Use of non-original, non-manufacturer-approved accessories may violate your local RF exposure guidelines and should be avoided.
2. Use only original, manufacturer-approved accessories when such accessories contain metal of any kind.
3. Avoid using your phone near strong electromagnetic sources, such as microwave ovens, sound speakers, TV and radio.
4. Avoid using your phone near metal structures (for example, the steel frame of a building).

EXPLOSIVE ATMOSPHERES

When in an area with a potentially explosive atmosphere or where flammable materials exist, the device should be turned off and the user should obey all signs and instructions. Sparks in such areas could cause an explosion or fire resulting in bodily injury or even death. Users are advised not to use the equipment at refueling points such as service or gas stations, and are reminded of the need to observe restrictions on the use of radio equipment in fuel depots, chemical plants, or where blasting operations are in progress. Areas with a potentially explosive atmosphere are often, but not always, clearly marked such as fueling areas, below deck on boats, fuel or chemical transfer or storage facilities, and including, but not limited to areas where the air contains chemicals or particles such as grain, dust, or

metal powders.

INTERFERENCE WITH MEDICAL EQUIPMENT FUNCTIONS

This product may cause medical equipment to malfunction. The use of this device is prohibited in most hospitals and medical clinics for which regulations and rules are commonly posted in such facilities. In these instances, turn your phone OFF as health care facilities frequently use equipment that is adversely affected by RF energy.   If you use any personal medical device(s), consult the manufacturer of your device(s) to determine if the device(s) is adequately shielded from external RF energy. Your health care provider may be able to assist you in obtaining this information.

NON-IONIZING RADIATION

Your device has an internal antenna. This product should be operated in its normal-use position to ensure the radiative performance and safety from interference. As with other mobile radio transmitting equipment, users are advised that for satisfactory operation of the equipment and for personal safety, it is recommended that no part of the human body should come too close to the antenna during equipment operation.

Use only the supplied integral antenna. Use of unauthorized or modified antennas may impair call quality and damage the phone, causing loss of performance and SAR levels exceeding the recommended limits, as well as causing non-compliance with local and national regulatory requirements.   In order to limit RF energy exposure and to ensure optimal phone performance, operate the device

only it its normal-use position.   Contact with the antenna area may impair call quality and cause your device to operate at a higher power level than needed which can reduce antenna performance and battery life.

BATTERY INFORMATION AND PRECAUTIONS

To assure product safety, there shall be precautions below.

! Danger

- Use dedicated chargers and follow the specified conditions when charging the cell.

- Use the cell only with the specified equipment.

- Do not put or store cell together with metal articles such as necklaces, hairpins, coins, or screws.

- Do not short circuit the (+) and (-) terminals with metal conductors.

- Do not place cell in a device with the (+) and (-) in a reverse way.

- Do not penetrate cell with a sharp articles such as a needle.

- Do not disassemble the cell.

- Do not weld the cell directly.

- Do not use a seriously damaged or deformed cell.

- Thoroughly read the user's manual before use., Inaccurate handling of polymer lithium ion cell may results in heat, fire, explosion,

damage or the capacity loss of the cell.

! Warning

- Do not put cell into a heating vessel, washing machine or high-pressure container.

- Do not use cell with primary batteries, or batteries of a different package, type, or brand.

- Stop charging the cell if charging is not completed within the specified time.

- Stop using the cell if abnormal heat, odor, discoloration, deformation or abnormal condition is detected during use, charge, or storage.

- Keep away from cell immediately when leakage or foul odor is detected.

- Wash well with clean water immediately if liquid leaks onto your skin or clothes.

- If liquid leaking from the cell gets into your eyes, do not rub your eyes. Wash them well with clean water and call physician immediately.

! Caution

- Store batteries out of reach of children so that they are not accidentally swallowed or handled.

- If younger children use the cell, their guardians should explain the proper handling.

- Be sure to read the user's manual and cautions on handling thoroughly before using the cell.

- Batteries have cycle life. Replace failed cell with a new cell that is the same brand immediately after normal life cycle expiration, or if

expiration has occurred prematurely.

Store cell in a low-humidity and low-temperature environment if cell is not used for an extended period of time.

- Keep it far away from articles or materials with static electric charges while the cell is charged, used or stored.

- Wipe with a dry cloth before using the cell if the terminals of the cell become dirty.

SAFETY INSTRUCTIONS OF TRAVEL CHARGER

Please read the following information carefully.

1.   The maximum ambient temperature of the travel charger shall not exceed 40°C (104 degrees F).

2.   The Travel Charger shall be installed according to specification. The current of load and output power shall not exceed the following value:

Input: AC100-240V~ 50/60Hz 0.15A

Output: DC5V $\overline{\underline{\overline{}}}$ 1A

3.   The Travel Charger shall be used for I.T. equipment only.

4.   For indoor use only.

5.   Cleaning – Unplug this from the wall outlet before cleaning. Do not use liquid cleaners or aerosol cleaners to clean;   use only a dry cloth.

6.   Water and moisture – Do not use this product under moist environment.

7.   Self-servicing – Attempting to service this product on your own, or opening or removing device covers may result in exposure to dangerous voltage or other hazards.

8.   Unplug this apparatus during lighting storms or when unused for lengthy durations.

9.   This Travel Charger is not intended to be repaired by service personnel in case of failure or component defect.

FCC NOTICE AND CAUTIONS

This device and its accessories comply with Part 15 of FCC Rules.

Operation is subject to the following conditions:

(1) This device and its accessories may not cause harmful interference.

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

Part 15.21 Statement：

Changes or modifications that are not expressly approved by the manufacturer could void the user's authority to operate the equipment.

Part of Statement 15.105:

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 you experience interference with reception (e.g., television), determine if this equipment is causing the harmful interference by turning the equipment off and then back on to see if the interference is affected.

If necessary, try correcting 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 further assistance.

TIA SAFETY INFORMATION

The following is the complete TIA Safety Information for wireless handheld phones:

Exposure to Radio Frequency Signal

Your wireless handheld portable phone is a low-power radio transmitter and receiver. When ON, it receives and sends out Radio

Frequency (RF) signals. In August 1996, the Federal Communications Commissions (FCC) adopted RF exposure guidelines with safety levels for handheld wireless phones. Those guidelines are consistent with the safety standards previously set by both U.S. and international standards 'bodies, as follows:

ANSI C95.1 (1992) *

NCRP Report 86 (1986)

ICNIRP (1996)

* American National Standards Institute; National Council on Radiation Protection and Measurements; International Commission on Non-Ionizing Radiation Protection. Those standards were based on comprehensive and periodic evaluations of the relevant scientific literature. For example, over 120 scientists, engineers, and physicians from universities, government health agencies, and industry reviewed the available body of research to develop the ANSI Standard (C95.1). The design of your phone complies with the FCC guidelines (and those standards).

Antenna Care

Use only the supplied or approved replacement antenna. Unauthorized antennas, modifications, or attachments could damage the phone and may violate FCC regulations.

Phone Operation

NORMAL POSITION: Hold the phone as you would any other telephone with the antenna pointed up and over your shoulder.

Tips on Efficient Operation

For your phone to operate most efficiently, do not touch the antenna unnecessarily when operating the phone. Contact with the antenna affects call quality and may cause the phone to operate at a higher power level than otherwise needed, thus reducing battery life.

Driving

Always observe the laws and regulations regarding wireless phone usages while driving.   Where cell phone use is permitted while driving, you MUST observe the following:

1.   Give full attention to driving -- driving safely is your first responsibility;

2.   Use hands-free operation, if available;

3.   Pull off the road and park before making or answering a call if driving conditions or the law requires that you do so.

Pacemakers

The Health Industry Manufacturers Association recommends that a minimum separation of six (6) inches be maintained between a handheld wireless phone and a pacemaker to avoid potential interference with the pacemaker. These recommendations are consistent with the independent research by and recommendations of Wireless Technology Research.

Persons with pacemakers:

1.   Should ALWAYS keep the phone more than six (6) inches from their pacemaker when the phone is turned ON;

2.   Should not carry the phone in a breast pocket;

3.   Should use the ear opposite the pacemaker to minimize the potential for interference;

4.   Should turn the phone OFF immediately if there is any reason to suspect that interference is occurring.

Electronic Devices

Most modern electronic equipment is shielded from RF signals but some equipment or devices might not be.

Hearing Aids

Some digital wireless phones may interfere with hearing aids. In the event of such interference, you please consult your service provider, or call customer service regarding alternatives.

Other Medical Devices

If you use other personal medical devices, consult the device manufacturer to determine if it is adequately shielded from external RF energy, or your health care provider may be able to advise about any harmful device interactions.

Vehicles

RF signals may affect improperly installed or inadequately shielded electronic systems in motor vehicles. Be certain to contact the

manufacturer or representative regarding this as well as manufacturer of any additional vehicle equipment.

Health Care Facilities

Please refer to pages 10 and 11 of this guide for information regarding medical interference with your device.

Aircraft

Please refer to pages 6 and 7 of this guide for information regarding operating electronic devices on aircrafts.

Posted Facilities

Turn your phone OFF in any facility where posted notices so require.

For Vehicles Equipped with an Air Bag

DO NOT place objects, including installed or portable wireless equipment, in the area over the air bag or in the air bag deployment area. If in-vehicle wireless equipment is improperly installed and the air bag inflates, serious injury could result since air bags inflate with great force.

SAFETY INFORMATION

Please read and observe the following information for safe and proper use of your phone and to prevent damage. Also, keep the user

guide in an accessible place after reading it for ease in locating it for future reference.

Violation of the instructions may cause minor or serious damage to the product.

1.   Do not disassemble, open, crush, bend or deform, puncture or shred your equipment.
2.   Do not modify or remanufacture your equipment. Do not attempt to insert foreign objects into the battery. Do not immerse your equipment in water or other liquids, or expose it to water or other liquids, fire, explosions or other hazards.
3.   Do not short-circuit the battery or allow metallic conductive objects to contact the battery terminals.
4.   Avoid dropping the phone. If the phone is dropped on a hard surface or elsewhere, take it to a service center for inspection if damage is suspected.

Charger and Adapter Safety

1.   The charger and adapter are intended for indoor use only.
2.   Insert the battery pack charger vertically into the wall power socket.
3.   Only use the approved battery charger so as to avoid serious damage to your phone.
4.   When traveling abroad, only use the approved battery pack charger along with the correct phone adapter.

Battery Information: Care and Proper Disposal

1.   Please dispose of your battery properly or take it to your local wireless carrier for recycling.

2. The battery doesn't need to be empty before recharging, and replace the battery when it no longer provides acceptable performance.   Note: The battery can be recharged several hundred times and it does not need to be empty in order to recharge.

3. Use only Coolpad-approved chargers specific to your phone model as they are designed to maximize battery life.

4. Do not disassemble or short-circuit the battery.

5. Keep the battery's metal contacts clean.

6. Recharge the battery after long periods of non-use to maximize battery life.   Note: Battery life will vary due to usage patterns and environmental conditions.

7. Use of extended backlighting, Browser, and data connectivity kits affect battery life as well as talk/standby times.

8. The self-protection function of the battery cuts the power of the phone when its operation is in an abnormal state. In this case, remove the battery from the phone, reinstall it, and turn the phone on.

Explosion, Shock, and Fire Hazards

1. Do not put your phone in a place that is subject to excessive dust, and always keep the minimum required distance between the power cord and heat sources.

2. Unplug the power cord prior to cleaning your phone, and clean the power plug pin when necessary.

3. When using the power plug, ensure that it's firmly connected.

4. Placing the phone in a pocket or bag without covering the phone receptacle (power plug pin), metallic articles (e.g.: coins, paperclips, pens) may short-circuit the phone.   Always cover the receptacle when not in use.

5. Metallic articles that come into contact with the phone may short-circuit the + and – battery terminals (metal strips) which may result in battery damage, or even an explosion.

General Notice

1. Using a damaged battery or placing a battery in your mouth may cause serious injury.

2. Placing items containing magnetic strip components (e.g.: credit cards, phone cards, bank books, subway tickets) near your phone may damage the data stored in the magnetic strips.

3. Talking on the phone for long periods of time may reduce call quality due to heat generation.

4. Do not use the phone if the antenna is damaged as it may cause a slight contact burn. Please communicate with a Coolpad Authorized Service Center to replace the damaged antenna.

5. Do not immerse your phone in water. If this happens, immediately turn the phone OFF and remove the battery. If the phone does not work, take it to a Coolpad Authorized Service Center.

6. Do not paint your phone.

7.   Phone data, including contact information, ringtones, text messages, voice messages, pictures or videos, etc., may be inadvertently deleted due to careless use, phone repair, or software upgrades. Please back up your important phone numbers and all other vital data. Note: Neither the manufacturer nor any person or entity associated therewith is liable for any damages whatsoever due to loss of any or all data stored on any of your devices.

8.   When using the phone in public places, set the ringtone to vibration so you don't disturb others.

9.   Do not turn your phone on or off while the device is in close proximity to your ear.

10. Use accessories, such as earphones and headsets with caution. Ensure that cables are tucked away safely and do not touch the antenna.

Caution:

Avoid potential hearing loss.

Prolonged exposure to loud sounds (including music) is the most common cause of preventable hearing loss. Some scientific research suggests that using portable audio devices, such as portable music players and cellular telephones, at high volume settings for long durations may lead to permanent hearing loss. This includes the use of headphones (including headsets, ear buds and Bluetooth®, or other wireless devices). Exposure to very loud sound has also been associated in some studies with tinnitus (ringing in the ear), hypersensitivity to sound, and distorted hearing. The amount of sound produced by a portable audio device varies depending on the

nature of the sound, the device, the device settings and the headphones. Hence, individual susceptibility to noise-induced hearing loss and other hearing problems can vary.   Please follow these important guidelines for hearing loss prevention:

1. Set the phone's volume in a quiet environment and select the lowest volume for which you can hear clearly.
2. When using headphones, turn the volume down if you cannot hear the people speaking near you or if the person sitting next to you can hear what you are listening to.
3. Do not turn the volume up to block out noisy surroundings. If you choose to listen to your portable device in a noisy environment, consider using noise-cancelling headphones to block out background noise.
4. As the volume increases, less time is required before your hearing could be affected, so consider limiting your listening time.
5. Avoid using headphones after exposure to extremely loud noises (e.g.: live concerts) that might cause temporary hearing loss which, in turn, might cause unsafe volume levels to sound like normal levels.
6. Do not listen at any volume that causes you discomfort. If you experience ringing in your ears, hear muffled speech or experience any temporary hearing difficulty after listening to your portable audio device, discontinue use and consult your health care provider.

You can obtain additional information on this subject from the following sources:

American Academy of Audiology

11730 Plaza American Drive, Suite 300 Reston VA 20190

Voice: (800) 222-2336

Email: info@audiology.org

Internet: www.audiology.org

National Institute on Deafness and Other Communication Disorders

National Institutes of Health

31 Center Drive, MSC 2320 Bethesda, MD USA 20892-2320

Voice: (301) 496-7243

Email: nidcdinfo@nih.gov

Internet: http://www.nidcd.nih.gov/health/hearing

National Institute for Occupational Safety and Health

Hubert H. Humphrey Bldg. 200 Independence Ave., SW Washington, DC 20201

Voice: 1-800-35-NIOSH (1-800-356- 4674)

Internet: http://www.cdc.gov/niosh/topics/noise/default.html

FDA CONSUMER UPDATE

The U.S. Food and Drug Administration's (FDA) Center for Devices and Radiological Health Consumer Update on Mobile Phones:

1. What is the FDA's role concerning the safety of wireless phones?

Under the law, the FDA does not review the safety of radiation-emitting consumer products such as wireless phones before they can be sold, as it does with new drugs or medical devices. However, the agency has authority to take action if wireless phones are shown to emit Radio Frequency (RF) energy at a level that is hazardous to the user. In such a case, the FDA could require the manufacturers of wireless phones to notify users of the health hazard and to repair, replace, or recall the phones so that the hazard no longer exists.

Although the existing scientific data does not justify FDA regulatory actions, the FDA has urged the wireless phone industry to take a number of steps, including the following:

1.   Support current and future research regarding possible biological effects of the type of RF emitted by wireless phones;

2.   Design wireless phones in a way that minimizes any RF exposure to the user that is not necessary for device function; and

3.   Cooperate in providing users of wireless phones with complete and accurate information regarding possible effects of wireless phone use on human health and safety.

The FDA belongs to an interagency working group of the federal agencies that have responsibility for different aspects of RF safety to ensure coordinated efforts at the federal level. The following agencies belong to this working group:

1.   National Institute for Occupational Safety and Health

2.   Environmental Protection Agency

3.   Occupational Safety and Health Administration

4.   National Telecommunications and Information Administration

The National Institutes of Health participates in some interagency working group activities as well. The FDA shares regulatory responsibilities for wireless phones with the Federal Communications Commission (FCC). All phones that are sold in the United States must comply with FCC safety guidelines that act to limit RF exposure. The FCC relies on the FDA and other health agencies for safety questions about wireless phones.

The FCC also regulates the base stations that the wireless phone networks rely upon. While these base stations operate at higher power than do the wireless phones themselves, the RF exposures that people get from these base stations are typically thousands of times lower than those they can get from wireless phones. Base stations are thus not the subject of the safety questions discussed in this document.

2. Do wireless phones pose a health hazard?

Current scientific evidence does not show that any health problems are associated with using wireless phones. There is no proof, however, that wireless phones are absolutely safe. Wireless phones emit low levels of Radio Frequency (RF) energy while operating microwave ranges (which also emit very low levels of RF when they are in standby mode).   While high levels of RF can produce health effects (by heating tissue), exposure to low-level RF that does not produce heating effects results in no known adverse health effects.

Many studies of low-level RF exposures have not uncovered any biological effects. Although some studies have suggested that some biological effects may occur, such findings have not been confirmed by additional research. In some cases, other researchers have had difficulty in reproducing those studies, and/or determining the reasons for inconsistent results.

3. What are the results of the research done already?

The research conducted thus far has produced conflicting results, and many studies have suffered from flaws in their research methods. Animal experiments investigating the effects of Radio Frequency (RF) energy exposures characteristic of wireless phones have yielded conflicting results that often cannot be repeated in other laboratories. A few animal studies, however, have suggested that low levels of RF could accelerate the development of cancer in laboratory animals. However, many of the studies that showed increased tumor development used animals that had been genetically engineered or treated with cancer-causing chemicals so as to be pre-disposed to develop cancer in the absence of RF exposure. Other studies exposed the animals to RF for up to 22 hours per day. These conditions are not similar to the conditions under which people use wireless phones, so it is largely unknown what the results of such studies mean for human health and safety. Three large epidemiology studies have been published since December 2000. These studies investigated possible associations between the use of wireless phones and primary brain cancer (glioma, meningioma, acoustic neuroma, other brain tumors, salivary gland tumors), leukemia, or other types of cancer. None of the studies demonstrated the existence of any harmful health effects from wireless phone RF exposures. However, none of the studies can provide absolute findings about long-term exposures

since the average period of phone use in these studies was approximately three years.

4. What kinds of phones are the subjects of this update?

Here the term "wireless phone" refers to handheld wireless phones with built-in antennas, often called "cell", "mobile", or "PCS" phones. These types of wireless phones can expose the user to measurable Radio Frequency (RF) energy because of the short distance between the phone and the user's head. These RF exposures are limited by FCC safety guidelines that were developed with the advice of the FDA and other federal health and safety agencies. When the phone is located at greater distances from the user, the exposure to RF is drastically reduced due to a person's RF exposure rapidly decreasing with increasing distance from the source.

The so-called "cordless phones," which have a base unit connected to the telephone wiring in a house, typically operate at far lower power levels, thus producing RF exposures far below the FCC safety limits.

5. What is the FDA doing to find out more about the possible health effects of wireless phone RF?

The FDA is working with the U.S. National Toxicology Program and with groups of investigators around the world to ensure that high-priority animal studies are conducted to address concerns about the effects of exposure to Radio Frequency (RF) energy.

The FDA has been a leading participant in the World Health Organization International Electro Magnetic Fields (EMF) Project since its inception in 1996. An influential result of this work has been the development of a detailed agenda of research needs that has implemented new research programs around the world. The project has also resulted in a series of public information documents on

EMF issues. The FDA and the Cellular Telecommunications & Internet Association (CTIA) have a formal Cooperative Research and Development Agreement (CRADA) to conduct research on wireless phone safety. The FDA provides the scientific oversight, obtaining input from experts in government, industry, and academic organizations. CTIA-funded research is conducted through contracts with independent investigators. The initial research will include both laboratory studies and studies of wireless phone users. The CRADA will also include a broad assessment of additional research needs in the context of the latest research developments around the world.

6. What research is needed to decide whether RF exposure from wireless phones poses a health risk?

A combination of laboratory studies and epidemiological studies of people actually using wireless phones would provide some of the vital data. Lifetime animal exposure studies could be completed in a few years. However, very large numbers of animals would be needed to provide reliable proof of a cancer-promoting effect, if one exists. Epidemiological studies can provide data that is directly applicable to human populations, but ten or more years of follow-up research may be needed to provide answers about certain health effects, such as cancer.

This is due to the interval between exposure time to a cancer-causing agent and the rate for which tumors develop - if they do. This could take several years into the future. The interpretation of epidemiological studies is hampered by difficulties in measuring actual RF exposure during day-to-day use of wireless phones. Many factors affect this measurement, such as the angle at which the phone is held, or which model of phone is used.

7. What has the FDA done to measure the Radio Frequency energy coming from wireless phones?

The Institute of Electrical and Electronic Engineers (IEEE) is developing a technical standard for measuring the Radio Frequency (RF) energy exposure from wireless phones and other wireless handsets with the participation and leadership of FDA scientists and engineers. The standard, "Recommended Practice for Determining the Spatial-Peak Specific Absorption Rate (SAR) in the Human Body Due to Wireless Communications Devices: Experimental Techniques", sets forth the first consistent test methodology for measuring the rate at which RF is deposited in the heads of wireless phone users. The test method uses a tissue-simulating model of the human head. Standardized SAR test methodology is expected to greatly improve the consistency of measurements made at different laboratories on the same phone. SAR is the measurement of the amount of energy absorbed in tissue, either by the whole body or a small part of the body. It is measured in watts/kg (or milliwatts/g) of matter. This measurement is used to determine whether a wireless phone complies with safety guidelines.

8. How can I find out how much Radio Frequency energy exposure I can get by using my wireless phone?

All phones sold in the United States must comply with Federal Communications Commission (FCC) guidelines that limit Radio Frequency (RF) energy exposures. The FCC established these guidelines in consultation with the FDA and the other federal health and safety agencies. The FCC limit for RF exposure from wireless phones is set at a Specific Absorption Rate (SAR) of 1.6 watts per kilogram (1.6W/kg). The FCC limit is consistent with the safety standards developed by the Institute of Electrical and Electronic Engineering (IEEE)

and the National Council on Radiation Protection and Measurement. The exposure limit takes into consideration the body's ability to remove heat from the tissues that absorb energy from the wireless phone and is set well below levels known to have effects. Manufacturers of wireless phones must report the RF exposure level for each model of phone to the FCC.

The FCC website (http://www.fcc.gov/cgb/cellular.html) gives directions for locating the FCC identification number on your phone, so you can find your phone's RF exposure level in the online listing.

9. What about children using wireless phones?

The scientific evidence does not show a danger to users of wireless phones, including children and teenagers. If you want to take steps to lower exposure to Radio Frequency (RF) energy, the measures described above would apply to children and teenagers using wireless phones. Reducing the time of wireless phone use and increasing the distance between the user and the RF source will reduce RF exposure.

Some groups sponsored by other national governments have advised that children be discouraged from using wireless phones at all. For example, the government in the United Kingdom distributed leaflets containing such a recommendation in December 2000. They noted that no evidence exists that using a wireless phone causes brain tumors or other ill effects. Their recommendation to limit wireless phone use by children was strictly precautionary; it was not based on scientific evidence that any health hazard exists.

10. What steps can I take to reduce my exposure to Radio Frequency energy from my wireless phone?

If there is a risk from these products- and at this point we do not know that there is - it is probably very small. But if you are concerned about avoiding even potential risks, you can take a few simple steps to minimize your exposure to Radio Frequency (RF) energy. Since time is a key factor in how much exposure a person receives, reducing the amount of time spent using a wireless phone will reduce RF exposure. If you must conduct extended conversations by wireless phone on a daily basis, consider placing more distance between your body and the source of the RF, since the exposure level drops off dramatically with distance. For example, you could use a headset and carry the wireless phone away from your body or use a wireless phone connected to a remote antenna. Again, the scientific data does not demonstrate that wireless phones are harmful. But if you are concerned about the RF exposure from these products, you can use measures like those described above to reduce your RF exposure from wireless phone use.

11. What about wireless phone interference with medical equipment?

Radio Frequency (RF) energy from wireless phones can interact with some electronic devices. For this reason, the FDA helped develop a detailed test method to measure Electro Magnetic Interference (EMI) of implanted cardiac pacemakers and defibrillators from wireless telephones. This test method is now part of a standard sponsored by the Association for the Advancement of Medical Instrumentation (AAMI). The final draft, a joint effort by the FDA, medical device manufacturers, and many other groups, was completed in late 2000. This standard will allow manufacturers to ensure that cardiac pacemakers and defibrillators are safe from wireless phone EMI. The FDA

has tested hearing aids for interference from handheld wireless phones and helped develop a voluntary standard sponsored by the Institute of Electrical and Electronic Engineers (IEEE). This standard specifies test methods and performance requirements for hearing aids and wireless phones so that no interference occurs when a person uses a "compatible" phone and a "compatible" hearing aid simultaneously. This standard was approved by the IEEE in 2000. The FDA continues to monitor the use of wireless phones for possible interactions with other medical devices. Should harmful interference be found to occur, the FDA will conduct testing to assess the interference and work to resolve the problem.

12. Where can I find additional information?

For additional information, please refer to the following resources: FDA web page on wireless phones (http://www.fda.gov), under "C" in the subject index, select Cell Phones > Current Research Results. Federal Communications Commission (FCC) RF Safety Program (http://www.fcc.gov/cgb/cellular.html) International Commission on Nonionizing Radiation Protection (http://www.icnirp.de)

World Health Organization (WHO) International EMF Project (http://www.who.int/emf)

Health Protection Agency (http://www.hpa.org.uk/)

TEN DRIVER SAFETY TIPS

Your wireless phone gives you the powerful ability to communicate by voice almost anywhere, anytime. An important responsibility accompanies the benefits of wireless phones, one that every user must uphold. When operating a car, driving is your first responsibility.

When using your wireless phone behind the wheel of a car, when permitted by local law, practice good common sense and remember the following tips:

1.   When available and permitted by local law, use a hands-free device. A number of hands-free wireless phone accessories are readily available today. Whether you choose an installed mounted device for your wireless phone or a speaker phone accessory, take advantage of these devices if available to you.

2.   Get to know your wireless phone and its features such as speed dial and redial. Carefully read your instruction manual and learn to take advantage of valuable features most phones offer, including automatic redial and memory. Also, work to memorize the phone keypad so you can use the speed dial function without taking your attention off the road.

3.   Suspend conversations during hazardous driving conditions or situations. Let the person you are speaking with know you are driving; if necessary, suspend the call in heavy traffic or hazardous weather conditions. Rain, sleet, snow, and ice can be hazardous, but so is heavy traffic. As a driver, your first responsibility is to pay attention to the road.

4.   Make sure you place your wireless phone within easy reach and where you can reach it without removing your eyes from the road. If you get an incoming call at an inconvenient time, if possible, let your voicemail answer it for you.

5.   Dial sensibly and assess the traffic; if possible, place calls when you are not moving or before pulling into traffic. Try to plan your calls before you begin your trip or attempt to coincide your calls with times you may be at a stop sign, red light, or otherwise

stationary. But if you need to dial while driving, follow this simple tip - dial only a few numbers, check the road and your mirrors, then continue.

6. Don't take notes or look up phone numbers while driving. If you are reading an address book or business card, or writing a "to-do" list while driving a car, you are not watching where you are going. Use common sense. Do not get caught in a dangerous situation because you are reading or writing and not paying attention to the road or nearby vehicles.

7. Use your wireless phone to call for help. Your wireless phone is one of the greatest tools you can own to protect yourself and your family in dangerous situations -- with your phone at your side, help is only three numbers away. Dial 911 or other local emergency number in the case of fire, traffic accident, road hazard, or medical emergency. Remember, it's a free call on your wireless phone!

8. Do not engage in stressful or emotional conversations that may be distracting. Stressful or emotional conversations and driving do not mix; they are distracting and even dangerous when you are behind the wheel of a car. Make people you are talking with aware you are driving and if necessary, suspend conversations which have the potential to divert your attention from the road.

Call roadside assistance or a special wireless non-emergency assistance number when necessary. Certain situations you encounter while driving may require attention, but are not urgent enough to merit a call for emergency services. But you can still use your wireless phone to lend a hand. If you see a broken-down vehicle posing no serious hazard, a broken traffic signal, a

minor traffic accident where no one appears injured or a vehicle you know to be stolen, call roadside assistance or other special non-emergency wireless number. The above tips are meant as general guidelines. Before deciding to use your mobile device while operating a vehicle, it is recommended that you consult your applicable jurisdiction's local laws or other regulations regarding such use. Such laws or other regulations may prohibit or otherwise restrict the manner in which a driver may use his or her phone while operating a vehicle.

9.   Use your wireless phone to help others in emergencies. Your wireless phone provides you a perfect opportunity to be a "Good Samaritan" in your community. If you see an auto accident, crime in progress or other serious emergency where lives are in danger, call 911 or other local emergency number, as you would want others to do for you.

CONSUMER INFORMATION ON SAR (Specific Absorption Rate)

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 (FCC) of the U.S. Government. These FCC exposure limits are derived from the recommendations of two expert organizations, the National Council on Radiation Protection and Measurement (NCRP) and the Institute of Electrical and Electronics Engineers (IEEE). In both cases, the recommendations were developed by scientific and engineering experts drawn from

industry, government, and academia after extensive reviews of the scientific literature related to the biological effects of RF energy. The exposure limit for wireless mobile phones employs a unit of measurement known as the Specific Absorption Rate, or SAR. The SAR is a measure of the rate of absorption of RF energy by the human body expressed in units of watts per kilogram (W/kg). The FCC requires wireless phones to comply with a safety limit of 1.6 watts per kilogram (1.6 W/kg). The FCC exposure limit incorporates a substantial margin of safety to give additional protection to the public and to account for any variations in measurements. Tests for SAR are conducted using standard operating positions specified by the FCC with the phone transmitting at its highest certified power level in all tested frequency bands. Although 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. Because the phone is designed to operate at multiple power levels to use only the power required to reach the network, generally, 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.　 This device was tested for typical body-worn operations with the back of the phone kept 1.0 cm between the user's body and the back of the phone. To comply with FCC RF exposure requirements, a minimum separation distance of 1.0 cm must be maintained between the user's body and the back of the phone. Third-party belt clips, holsters, and similar accessories containing metallic components should not be used.

Body-worn accessories that cannot maintain 1.0 cm separation distance between the user's body and the back of the phone, and have not been tested for typical body-worn operations may not comply with FCC RF exposure limits and should be avoided.

The FCC has granted an Equipment Authorization for this model phone with all reported SAR levels evaluated as in compliance with the FCC RF emission guidelines.

The highest SAR value for this model phone when tested for use at the ear is 1.44 W/kg and when worn on the body, as described in this user's manual, is 1.43 W/kg. While there may be differences between SAR levels of various phones and at various positions, they all meet the government requirement for safe exposure.

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/ea/fccid/ after searching on FCC ID: WVBAL500.

To find information that pertains to a particular model phone, this site uses the phone FCC ID number which is usually printed somewhere on the case of the phone. Sometimes it may be necessary to remove the battery pack to find the number. Once you have the FCC ID number for your phone, follow the instructions on the website and it should provide values for typical or maximum SAR for that phone.

Additional information on Specific Absorption Rates (SAR) can be found on the Cellular Telecommunications Industry Association (CTIA) website at http://www.ctia.org/

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.