



SoMo™ 650

User's Guide



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Other than the above, Socket can assume no responsibility for anything resulting from the application of information contained in this manual. Please refrain from any applications of the Socket product that are not described in this manual. Please refrain from disassembling the device. Disassembly will void the product warranty. Track new product releases, software updates and technical bulletins online at: www.socketmobile.com.

Contents and specifications subject to change without notice.

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Important Safety Instructions

Please read and follow these safety instructions before using your device for the first time, and save them for future reference.

- Keep away from extremely hot, cold or humid conditions.
- Do not allow the device to get wet.
- Avoid shock or vibrations.
- Do not open your device. Any attempts to open this device will void the warranty.
- Wipe the touch screen only with a lint-free cloth, slightly dampened, while the device is switched off.
- Do not place objects on top of the device.
- Do not charge the device in extremely hot or cold conditions.
- Please only use the supplied USB synchronization cable.
- Please do not use other chargers or adapters, as these may damage your device.
- Do not remove SD/MMC or CF cards while they are being accessed.
- Do not use this device in damp, wet or rainy conditions.

Introduction

Package contents

Please check that the following items are included in the SoMo 650 package:

- SoMo 650
- Battery
- Stylus
- USB synchronization cable
- AC adapter
- Carrying case (version 650-M only)
- Cradle (version 650-M only)
- Getting Started CD
- Quick Start Guide



NOTE: Additional accessories are available separately. For more information, please visit: www.socketmobile.com/products/accessories/

System requirements

Before you start using your new SoMo 650, you should set up a host desktop/laptop computer for synchronization.

If your host computer is running Windows Vista, it is ready to synchronize with the SoMo 650.

If your host computer is running Windows 2000/XP, Microsoft® ActiveSync® 4.2 or greater is required (Socket recommends version 4.5, a download link is provided in the Getting Started CD). In order to install the ActiveSync software, your Windows 2000/XP computer must meet the following minimum requirements:

- Intel® Pentium® processor (minimum 233 MHz)
- 64 MB RAM
- 120 MB disk space
- CD-ROM drive
- USB port
- SVGA (or compatible) graphics card supporting 256 colors
- Microsoft® Internet Explorer 6.0

SocketCare™

The SocketCare warranty and service program is available for the SoMo 650 for an additional cost. For more information, please visit:

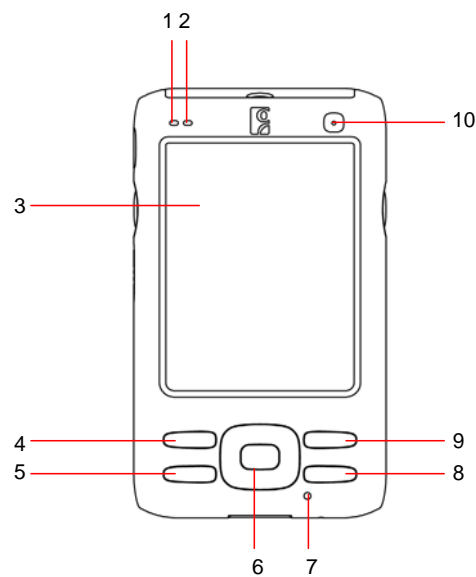
www.socketmobile.com/support.

Product registration

Socket highly recommends that all customers register their Socket products. Registered users receive priority for technical support, special offers on product upgrades, and the latest new product information. Register online at: www.socketmobile.com/support/support/new/

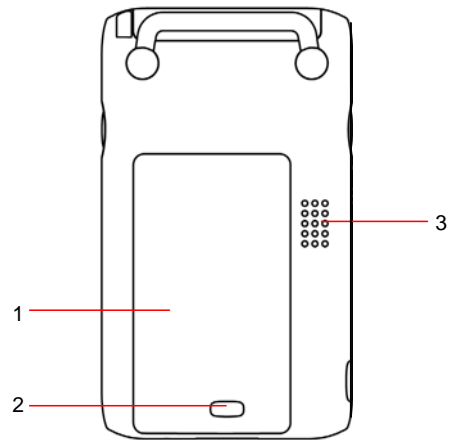
SoMo 650 tour

Front



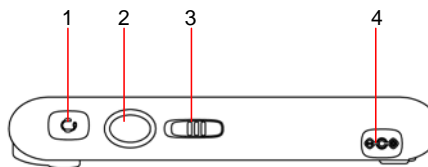
1. Blue/Green LED for *Bluetooth*®, Wi-Fi®
2. Red/Green LED for alarm, battery charging
3. 3.5" TFT LCD
4. Calendar shortcut button
5. Messaging shortcut button
6. 5-way navigation button
7. Microphone
8. Contacts shortcut button
9. Today shortcut button
10. Power button

Back



1. Battery cover
2. Battery cover release
3. Speaker

Left



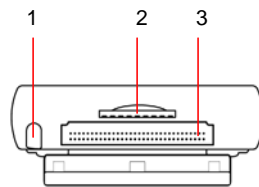
1. Hands-free (headset/microphone) connector
(lift rubber cover to access)
2. Left programmable application button
(launches Voice Notes by default)
3. Hold switch
4. DC-in connector (lift rubber cover to access)

Right



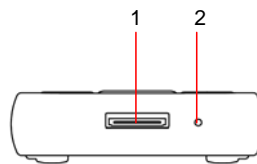
5. Right programmable application button (launches Radio Manager by default)

Top (with rubber cover open)



1. Stylus holder and stylus
2. SD (Secure Digital)/SDIO/MMC (MultiMedia Card) slot (lift rubber cover to access)
3. CF (CompactFlash) slot (lift rubber cover to access)

Bottom





1. USB synchronization/host cable connector
2. Soft reset button

Getting Started

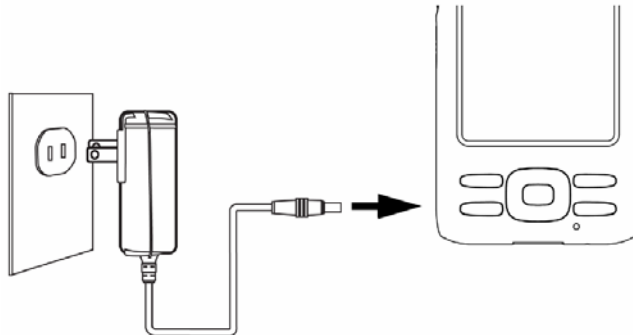
Installing/Removing the battery

Remove the back cover and place the battery into the battery compartment. Then replace the cover.




-  **NOTE:** After changing the battery, please make sure you fasten the battery cover.
-  **CAUTION:** RISK OF EXPLOSION IF BATTERY IS REPLACED BY AN INCORRECT TYPE. DISPOSE OF BATTERIES ACCORDING TO THE PRODUCT DISPOSAL NOTICE ON PAGE 22.

Charging your SoMo 650


1. Connect the AC adapter to the DC-in connector on the left side of the device, as shown below. See “Left” on page 7 for the location of the DC-in connector. Alternatively, you can use the desktop cradle, if included with your version of the SoMo 650.



2. Plug the AC adapter into a suitable wall socket.


-  **NOTE:** The SoMo 650 should be charged for 4 hours before first use. Afterwards, charge the device as needed according to its battery level.
-  **NOTE:** While charging, the power LED will be red. When charging is complete, it will change to green. For more information about the LEDs, please refer to page 19.
-  **NOTE:** The charging cradle included with the SoMo 650 provides a compartment for charging an extra battery. You can charge an extra battery and the SoMo 650 simultaneously in the cradle.


Setting up your SoMo 650


 **NOTE:** Make sure your SoMo 650 is fully charged before proceeding.


1. Disable the hold switch (found on the left side of your SoMo 650) by moving it up to the unlocked position. See “Left” on page 7 for the location of the hold switch.
2. Turn on your SoMo 650 by pressing the power button on the front (top right-hand corner). See “Front” on page 6 for the location of the power button.
3. Follow the onscreen instructions to set up your SoMo 650.

Installing Microsoft ActiveSync on your desktop/laptop computer

 **NOTE:** This step is not required if your computer is running Windows Vista.

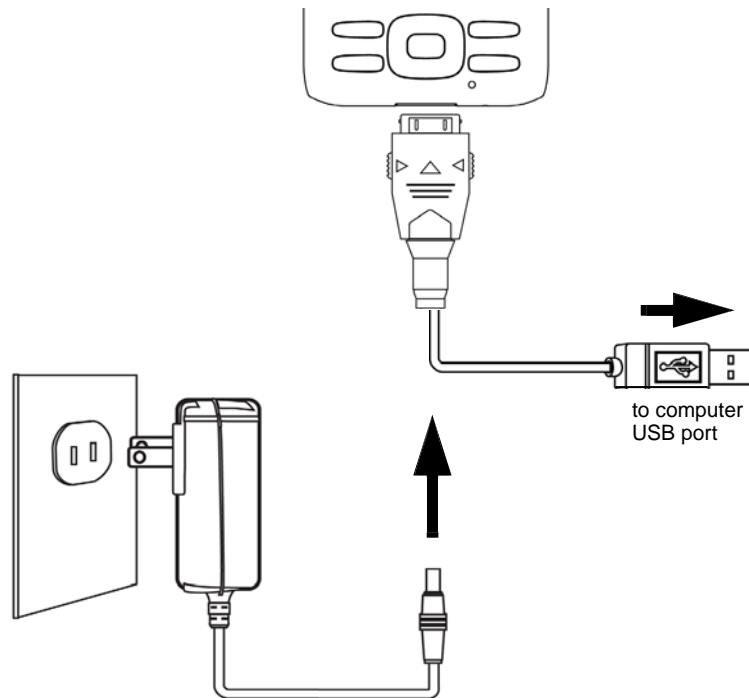
 **NOTE:** Do not connect your SoMo 650 to your desktop/laptop computer until ActiveSync has been installed.


1. Close any programs running on your computer.
2. Insert the SoMo 650 Companion CD into the computer's CD-ROM drive. The CD's welcome page will appear.
3. Click the animated forward icon to proceed to the next screen.
4. Follow the instructions to install Microsoft ActiveSync.
5. After installation, the ActiveSync icon will appear on your computer's system tray (usually on the lower right-hand corner of the screen). 

 **NOTE:** Refer to the ActiveSync software online Help for information on how to use the software. If at any time, you would like to restart this setup program, simply re-insert the CD into the CD-ROM drive.

Connecting your SoMo 650 to your computer

Plug the USB synchronization cable into the connector on the bottom of your SoMo 650. Plug the other end of the USB synchronization cable into a suitable USB port on your computer (it is recommend that you also connect the AC adapter, either as shown below, or as shown in “Charging your SoMo 650” on page 9).




 **NOTE:** You can also charge your SoMo 650 in its cradle, if included with your version of the device. The cradle has a connector for the USB synchronization cable and DC-in at the back, as well as two USB ports, which can be used for USB devices such as a keyboard or mouse.

Using Microsoft ActiveSync for the first time

 **NOTE:** For computers running Windows Vista, the Windows Mobile Device Center will appear instead.

When you connect your SoMo 650 to your computer for the first time, the 'New Partnership' setup wizard will automatically appear on your computer screen.



 **NOTE:** If the wizard does not automatically appear, open ActiveSync manually by clicking the Windows Start menu > All Programs > Microsoft ActiveSync.

Follow the setup wizard's simple instructions. Once completed, the first synchronization will start automatically.

After the synchronization is complete, you will see that the Calendar, Contacts and Tasks on your SoMo 650 have been updated.

The next time you wish to use ActiveSync, you just need to plug your SoMo 650 into your computer. ActiveSync will then open automatically and update your device.

Controlling the SoMo 650

Buttons

Your SoMo 650 has several buttons, as follows:

- Power button
- Left programmable application button (defaulted to Voice Notes default)
- Right programmable application button (defaulted to Radio Manager)
- Calendar shortcut button
- Contacts shortcut button
- 5-way navigation button
- Messaging shortcut button
- Today shortcut button

For more information on the position of these buttons, see “SoMo 650 tour” on page 6.

Hold switch

The hold switch can be used to put the SoMo 650 in rest mode, so any applications or wireless connections running on your device will remain active, but the buttons and screen will be disabled in order to prevent accidental input. To put your device on hold, move the switch in the down position.

For more information on the position of these buttons, see “SoMo 650 tour” on page 6.




NOTE: The hold switch is not related to the software lock function accessible from the Today screen.

Stylus


You can use the stylus in three ways.

- **Tap an item:** Use to select an option, similar to left-clicking a computer mouse.
- **Tap and hold an item:** Reveals a submenu, if available. Similar to right-clicking a computer mouse.
- **Drag:** Hold the stylus against the screen and drag to highlight multiple items, or to move the position of an item. Similar to left-clicking and dragging a computer mouse.

 **NOTE:** Alternatively, if you are using the SoMo 650, you can enter information by docking the SoMo in the cradle and using the cradle's two USB ports to connect a keyboard and/or mouse.



Start menu

From the Start menu, you can access programs, settings and Help topics.

The Start menu can be accessed by tapping .

Online help

Your SoMo 650 contains online help files. These can be accessed in two main ways:

1. Press  > **Help** > **Contents** for a list of Help topics.
2. To access Help for any particular application, open the application and then tap  > **Help**.

Resetting your SoMo 650

If your SoMo 650 ever stops responding to buttons or screen taps, perform a reset. There are two types of reset, as follows:

Soft reset

A soft reset is similar to rebooting a computer. No files are deleted during a soft reset.

To perform a soft reset:

Using the tip of your stylus, lightly press the Reset button inside the hole on the bottom of your SoMo 650. For more information on the location of the Reset button, see "Bottom" on page 8.

Clean reset

A clean reset is more powerful than a soft reset. It will delete files and folders and should only be carried out if a soft reset fails to solve the problem. When you perform a clean reset, formats, preferences and other settings including date and time are restored to their factory default settings. All data, records and entries, except for those stored in ROM, will be erased.

To perform a clean reset:

Press and hold the Left Programmable Application Button, the Calendar and Contacts shortcut buttons on your SoMo 650. For more information on the location of these buttons, see "Front" on page 6.

While holding the three buttons, using the tip of your stylus, lightly press the Reset button inside the hole on the bottom of your SoMo 650. Continue to hold the three until the Socket Splash Screen (pictured at right) appears, at this point stop pressing the three buttons, and follow the on screen instructions.

For more information on the location of the Reset button, see "Bottom" on page 8.



Upgrading the Firmware

ADVANCED USERS ONLY!

You can download firmware upgrades from the Socket website (www.socketmobile.com/support/downloads).

To upgrade your firmware:

- Format SD card by FAT (FAT16).
- Save the downloaded firmware upgrade to an SD card, then insert it into your SoMo 650.
- With the SoMo 650 already switched on, hold the right programmable application button, and while this button is still being pressed, use the stylus to press and release the reset button on the bottom of the device.
- Keep the the right programmable application button pressed until you see "EBOOT", then wait until after it counts down to zero before releasing.
- The firmware upgrading process will then begin. Do not press any buttons while the upgrade is in progress.
- Once the upgrade is complete, the SoMo 650 will reboot normally.

Specifications

Processor	Intel PXA270@624MHz CPU
Memory	SDRAM: 128MB NAND Flash: 256MB
Display	65K colors TFT LCD, 3.5" 16 bit-per-pixel 240 (w) x 320 (L) resolution (QVGA size) portrait and landscape modes, default portrait mode. Glass analog resistive touch panel White LED backlight
Audio	Headset Jack: 2.5mm, 4-ring type, support for both Voice & Stereo music Mono 0.5W speaker Omni-directional
Connectors	SoMo 650 DC-in (5V, 1A) USB synchronization/host cable connector Cradle Docking connector DC-in (5V, 3A) USB synchronization cable connector USB connector x 2 (Type A)
Connectivity	<i>Bluetooth</i> : v2.0 + EDR Class 2 IEEE® 802.11b/g
Mass Storage & Expansion Slots	User accessible SD/SDIO/MMC expansion slot CF I/O Type II expansion slot
USB	USB 1.1 support host/client (x2) (Cradle only)
Battery	Standard 1200 mAh, rechargeable, Lithium-ion battery pack.
Dimensions	Height 127.6 mm Width 74.5 mm Depth 18.5 mm Weight 179 g (including standard battery and stylus)
Operating Temperature	0° to 40° C (32° to 120° F)
Storage Temperature	-25° to 75° C (-13° to 167° F)
Humidity	95% non-condensing

Drop Specification	Multiple 1 meter drops to concrete covered with vinyl
ESD Specification	+/- 8kV air discharge, +/- 8kV direct discharge
Operating System	Microsoft® Windows Mobile® 5.0 Premium Edition
Pre-Loaded Software	Programmable Home Screen Calculator MSN Messenger Client Word Mobile Excel Mobile PowerPoint Mobile IE Mobile Outlook Mobile .NET Compact Framework v2.0 Windows Media Player 10.2 Mobile ActiveSync Client v4.x Socket Mobile Wi-Fi Companion™ Socket Mobile SocketScan™ Socket Mobile Connect!Agent™ Socket Mobile Modem Utilities Socket Mobile Ethernet Utilities Socket Mobile Serial I/O Utilities

LED Indicators

LED	LED Behavior	Meaning
Battery Status/ Alarm LED	Flashing red	Alarm/Notification, including Low Battery Notification
	OFF	Running on battery power
	Solid red light when connected to charger	Charging
	Solid green light when connected to charger	Fully charged
Wireless Status LED	Flashing blue	<i>Bluetooth</i> radio is turned on
	Flashing green	Wi-Fi radio is turned on
	Flashing blue and green	<i>Bluetooth</i> and Wi-Fi radios are turned on

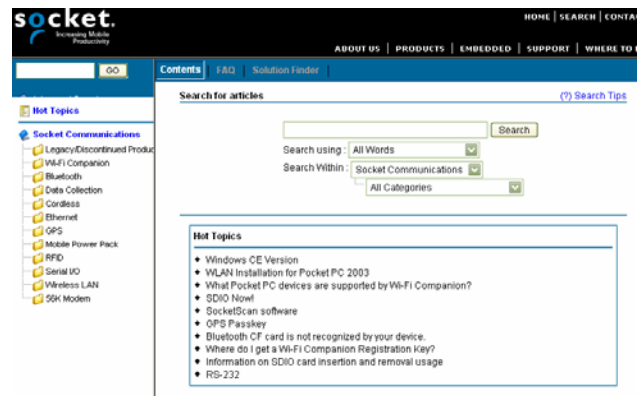
Technical Support

Socket offers several levels of Customer Support in order to better serve our customers.

Socket Online Support (SOS)

SOS is a virtual technical support assistant that can help you with your product support questions or FAQs any time. SOS responds immediately to your inquiry, and no product registration is needed to use the system. To access SOS, click on the SOS link at:

www.socketmobile.com/support/faq/



Technical Support

If you would like personal assistance from a Socket technical support representative, first register your product at www.socketmobile.com/support/support/new/

Afterwards, log in, click on the **Technical Support** tab, and click **Create New Ticket**. Follow the online process to submit an email inquiry. Please allow 2 business days for a response.

Limited Warranty

Socket Communications Incorporated dba Socket Mobile Incorporated (Socket) warrants this product against defects in material and workmanship, under normal use and service, for one (1) year from the date of purchase.

EXCLUDES: Consumables such as batteries, cables, cases, straps, and chargers. (90 day coverage only)

An extended warranty is available separately for the SoMo 650. Please visit: www.socketmobile.com/support/ for more information.

Incompatibility is not a defect covered by Socket's warranty. During the warranty period, Socket will, at its option, repair or replace the defective product at no charge when furnished with proof of retail purchase, provided that you deliver the product to Socket or to an authorized Socket Service Center.

The returned product must be accompanied by a return material authorization (RMA) number issued by Socket or by an authorized Socket Service Center. If you ship the product, you must use the original container or equivalent and you must pay the shipping charges to Socket. Socket will pay surface shipping charges back to any location in the contiguous United States. This warranty applies only to the original retail purchaser and is not transferable.

Socket may, at its option, replace or repair the product with new or reconditioned parts and the returned product becomes Socket's property. Socket warrants the repaired or replaced products to be free from defects in material or workmanship for ninety (90) days after the return shipping date, or for the remainder of the original warranty period, whichever is greater.

This warranty does not cover the replacement of products damaged by abuse, accident, misuse or misapplication, nor as a result of service or modification other than by Socket. This warranty is void if you install batteries into the product that were not supplied by Socket.

SOCKET IS NOT RESPONSIBLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING FROM BREACH OF ANY EXPRESS OR IMPLIED WARRANTY, INCLUDING DAMAGE TO

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Some states do not allow limitation of implied warranties, or the exclusion or limitation of incidental or consequential damages, so the above limitations or exclusions may not apply to you. This warranty gives you specific legal rights, and you may also have other rights that vary from state to state. This product may contain fully tested, recycled parts, warranted as if new. For more warranty information: www.socketmobile.com/contact.

PRODUCT DISPOSAL: Your device should not be placed in municipal waste. Please check local regulations for disposal of electronic products.



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LIMITED WARRANTY. SOCKET warrants that the original disk or CD ROM is free from defects for 90 days from the date of delivery of the SOFTWARE.

CUSTOMER REMEDIES. SOCKET'S entire liability and your exclusive remedy shall be, at SOCKET'S option, either (a) return of the price paid or (b) replacement of the SOFTWARE which does not meet SOCKET'S Limited Warranty and which is returned to SOCKET with a copy of your receipt. Any replacement SOFTWARE will be warranted for the remainder of the original warranty period or 30 days, whichever is longer. THESE REMEDIES ARE NOT AVAILABLE OUTSIDE OF THE UNITED STATES OF AMERICA.

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CONTROLLING LAW AND SEVERABILITY. This License shall be governed by laws of the United States and the State of California. If for any reason a court of competent jurisdiction finds any provision, or portion thereof, to be unenforceable, the remainder of this License shall continue in full force and effect.

Regulatory Compliance

FCC: Part 15, Class B

CE: EN

RoHS and WEEE compliant

Electrical Safety EN60950, UL, CUL

EMI / RFI

Wi-Fi Alliance Certification

Bluetooth Certification (BQB test)

USB IF Test

Microsoft Windows Mobile 5.0 Logo Test Certification

EU/International: EN301 489-1, -17

EN61000-4-2: 1995, ESD $\pm 8\text{kV}$ air/ $\pm 4\text{kV}$ contact

EN61000-4-3: 1997, radiated Immunity 3V/m

EN61000-4-4: 1995, EFT $\pm 0.5\text{kV}$

EN61000-4-5: 1995, Surge $\pm 0.5\text{kV}$

EN61000-4-6: 1

Federal Communication Commission Interference Statement

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 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.

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

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

IMPORTANT NOTE:**Radiation Exposure Statement:**

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. End users must follow the specific operating instructions for satisfying RF exposure compliance. To maintain compliance with FCC RF exposure compliance requirements, please follow operation instruction as documented in this manual.

This PDA has been tested and demonstrated compliance when *Bluetooth* and WLAN are transmitting simultaneously. This PDA must not be co-located or operating in conjunction with any other antenna or transmitter.

For body worn operation, this device has been tested and meets the FCC RF exposure guidelines when used with the Socket Mobile accessories supplied or designated for this product. Use of other accessories may not ensure compliance with FCC RF exposure guidelines."

Industry Canada Statement:

This device complies with RSS-210 of the Industry Canada Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

IMPORTANT NOTE:**Radiation Exposure Statement:**

This equipment complies with IC radiation exposure limits set forth for an uncontrolled environment. End users must follow the specific operating instructions for satisfying RF exposure compliance. To maintain compliance with IC RF exposure compliance requirements, please follow operation instruction as documented in this manual.

European Union Notice:

Radio products with the CE marking comply with the R&TTE Directive (1999/5/EC), the EMC Directive (89/336/EEC) and the Low Voltage Directive (73/23/EEC) issued by the Commission of the European Community.

Compliance with these directives implies conformity to the following European Norms:

- ◆ EN 60950 Product Safety
- ◆ EN 300 328 Technical requirement for radio equipment
- ◆ EN 301 489-1/-17 General EMC requirements for radio equipment