

Introduction

The U.S. Robotics Wireless *MAX*g PC Card and PCI Adapter are the solution to your home and small business wireless connectivity needs. *MAX*g technology provides the maximum 802.11g range in the industry, delivering optimal wireless connections to your PCs, laptops, and other wireless devices. *MAX*g also provides the maximum speed – up to 125 Mbps – delivering large files like MP3s, digital photos, and digital video through your network fast and efficiently. And with *MAX*g, your network will be protected with a maximum security suite of capabilities, including Wi-Fi Protected Access (WPA), WPA2/802.11i (AES Encryption), Network name (SSID) authentication, and more.

And to assure a simple, straight-forward installation, U.S. Robotics developed the SureStart installation wizard. SureStart walks you through the installation of any *MAX*g PC Cards, PCI Adapters, USB Adapters, or Routers in a seamless fashion. In addition, SureStart provides easy-to-understand guidance to set up security for your wireless network. Sharing Internet access securely, wirelessly or wired, has never been easier.

What You Need to Begin

- PC with an available PC card slot or PCI slot
- A functioning Ethernet-based cable or DSL modem or other WAN connection for Internet access
- A browser that supports HTML 4.01 specification with Javascript enabled

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Wireless MAXg PC Card and PCI Adapter User Guide						
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Product Specifications

Wireless MAXg PC Card

- Complies with IEEE 802.11g 54 Mbps wireless radio standard
- 100mW power output

Wireless MAXg PCI Adapter

- Complies with IEEE 802.11g 54 Mbps wireless radio standard
- 100mW power output
- 2 dBi Detachable Reverse SMA Antenna

Security Features

- WPA and WPA2 (Wi-Fi Protected Access)
- 64/128-bit WEP (Wired Equivalent Privacy) data encryption
- Ability to disable wireless radio

Acknowledgements

This product includes software developed by MDC and its licensors.

This product includes software developed by the OpenSSL Project for use in the OpenSSL Toolkit (<u>http://www.openssl.org/</u>). This product includes cryptographic software written by Eric Young (<u>eay@cryptsoft.com</u>). This product includes software written by Tim Hudson (<u>tjh@cryptsoft.com</u>).



U.S. Robotics Corporation Two (2) Year Limited Warranty

1.0 GENERAL TERMS:

1.1 This Limited Warranty is extended only to the original end-user purchaser (CUSTOMER) and is not transferable.

1.2 No agent, reseller, or business partner of U.S. Robotics Corporation (U.S. ROBOTICS) is authorised to modify the terms of this Limited Warranty on behalf of U.S. ROBOTICS.

1.3 This Limited Warranty expressly excludes any product that has not been purchased as new from U.S. ROBOTICS or its authorised reseller.

1.4 This Limited Warranty is only applicable in the country or territory where the product is intended for use (As indicated by the Product Model Number and any local telecommunication approval stickers affixed to the product).

1.5 U.S. ROBOTICS warrants to the CUSTOMER that this product will be free from defects in workmanship and materials, under normal use and service, for TWO (2) YEARS from the date of purchase from U.S. ROBOTICS or its authorised reseller.

1.6 U.S. ROBOTICS sole obligation under this warranty shall be, at U.S. ROBOTICS sole discretion, to repair the defective product or part with new or reconditioned parts; or to exchange the defective product or part with a new or reconditioned product or part that is

the same or similar; or if neither of the two foregoing options is reasonably available, U.S. ROBOTICS may, at its sole discretion, provide a refund to the CUSTOMER not to exceed the latest published U.S. ROBOTICS recommended retail purchase price of the product, less any applicable service fees. All products or parts that are exchanged for replacement will become the property of U.S. ROBOTICS.

1.7 U.S. ROBOTICS warrants any replacement product or part for NINETY (90) DAYS from the date the product or part is shipped to Customer.

1.8 U.S. ROBOTICS makes no warranty or representation that this product will meet CUSTOMER requirements or work in combination with any hardware or software products provided by third parties.

1.9 U.S. ROBOTICS makes no warranty or representation that the operation of the software products provided with this product will be uninterrupted or error free, or that all defects in software products will be corrected.

1.10 U.S. ROBOTICS shall not be responsible for any software or other CUSTOMER data or information contained in or stored on this product.

2.0 CUSTOMER OBLIGATIONS:

2.1 CUSTOMER assumes full responsibility that this product meets CUSTOMER specifications and requirements.

2.2 CUSTOMER is specifically advised to make a backup copy of all software provided with this product.

2.3 CUSTOMER assumes full responsibility to properly install and configure this product and to ensure proper installation, configuration, operation and compatibility with the operating environment in which this product is to function.

2.4 CUSTOMER must furnish U.S. ROBOTICS a dated Proof of Purchase (copy of original purchase receipt from U.S. ROBOTICS or its authorised reseller) for any warranty claims to be authorised.

3.0 OBTAINING WARRANTY SERVICE:

3.1 CUSTOMER must contact U.S. ROBOTICS Technical Support or an authorised U.S. ROBOTICS Service Centre within the applicable warranty period to obtain warranty service authorisation.

3.2 Customer must provide Product Model Number, Product Serial Number and dated Proof of Purchase (copy of original purchase receipt from U.S. ROBOTICS or its authorised reseller) to obtain warranty service authorisation.

3.3 For information on how to contact U.S. ROBOTICS Technical Support or an authorised U.S. ROBOTICS Service Centre, please see the U.S ROBOTICS corporate Web site at: www.usr.com

3.4 CUSTOMER should have the following information / items readily available when contacting U.S. ROBOTICS Technical Support:

- Product Model Number
- Product Serial Number
- Dated Proof of Purchase
- CUSTOMER contact name & telephone number
- CUSTOMER Computer Operating System version
- U.S. ROBOTICS Installation CD-ROM
- U.S. ROBOTICS Installation Guide

4.0 WARRANTY REPLACEMENT:

4.1 In the event U.S. ROBOTICS Technical Support or its authorised U.S. ROBOTICS Service Centre determines the product or part has a malfunction or failure attributable directly to faulty workmanship and/or materials; and the product is within the TWO (2) YEAR warranty term; and the CUSTOMER will include a copy of the dated Proof of Purchase (original purchase receipt from U.S. ROBOTICS or

its authorised reseller) with the product or part with the returned product or part, then U.S. ROBOTICS will issue CUSTOMER a Return Material Authorisation (RMA) and instructions for the return of the product to the authorised U.S. ROBOTICS Drop Zone.

4.2 Any product or part returned to U.S. ROBOTICS without an RMA issued by U.S. ROBOTICS or its authorised U.S. ROBOTICS Service Centre will be returned.

4.3 CUSTOMER agrees to pay shipping charges to return the product or part to the authorised U.S. ROBOTICS Return Centre; to insure the product or assume the risk of loss or damage which may occur in transit; and to use a shipping container equivalent to the original packaging.

4.4 Responsibility for loss or damage does not transfer to U.S. ROBOTICS until the returned product or part is received as an authorised return at an authorised U.S. ROBOTICS Return Centre.

4.5 Authorised CUSTOMER returns will be unpacked, visually inspected, and matched to the Product Model Number and Product Serial Number for which the RMA was authorised. The enclosed Proof of Purchase will be inspected for date of purchase and place of purchase. U.S. ROBOTICS may deny warranty service if visual inspection of the returned product or part does not match the CUSTOMER supplied information for which the RMA was issued.

4.6 Once a CUSTOMER return has been unpacked, visually inspected, and tested U.S. ROBOTICS will, at its sole discretion, repair or replace, using new or reconditioned product or parts, to whatever extent it deems necessary to restore the product or part to operating condition.

4.7 U.S. ROBOTICS will make reasonable effort to ship repaired or replaced product or part to CUSTOMER, at U.S. ROBOTICS expense, not later than TWENTY ONE (21) DAYS after U.S. ROBOTICS receives the authorised CUSTOMER return at an authorised U.S. ROBOTICS Return Centre.

4.8 U.S. ROBOTICS shall not be liable for any damages caused by delay in delivering or furnishing repaired or replaced product or part.

5.0 LIMITATIONS:

5.1 THIRD-PARTY SOFTWARE: This U.S. ROBOTICS product may include or be bundled with third-party software, the use of which is governed by separate end-user license agreements provided by third-party software vendors. This U.S. ROBOTICS Limited Warranty does not apply to such third-party software. For the applicable warranty refer to the end-user license agreement governing the use of such software.

5.2 DAMAGE DUE TO MISUSE, NEGLECT, NON-COMPLIANCE, IMPROPER INSTALLATION, AND/OR ENVIRONMENTAL FACTORS: To the extent permitted by applicable law, this U.S. ROBOTICS Limited Warranty does not apply to normal wear and tear; damage or loss of data due to interoperability with current and/or future versions of operating system or other current and/or future software and hardware; alterations (by persons other than U.S. ROBOTICS or authorised U.S. ROBOTICS Service Centres); damage caused by operator error or non-compliance with instructions as set out in the user documentation or other accompanying documentation; damage caused by acts of nature such as lightning, storms, floods, fires, and earthquakes, etc. Products evidencing the product serial number has been tampered with or removed; misuse, neglect, and improper handling; damage caused by undue physical, temperature, or electrical stress; counterfeit products; damage or loss of data caused by a computer virus, worm, Trojan horse, or memory content corruption; failures of the product which result from accident, abuse, misuse (including but not limited to improper installation, connection to incorrect voltages, and power points); failures caused by products not supplied by U.S. ROBOTICS; damage cause by moisture, corrosive environments, high voltage surges, shipping, abnormal working conditions; or the use of the product outside the borders of the country or territory intended for use (As indicated by the Product Model Number and any local telecommunication approval stickers affixed to the product).

5.3 TO THE FULL EXTENT ALLOWED BY LAW, THE FOREGOING WARRANTIES AND REMEDIES ARE EXCLUSIVE AND ARE IN LIEU OF ALL OTHER WARRANTIES, TERMS, OR CONDITIONS, EXPRESS OR IMPLIED, EITHER IN FACT OR BY OPERATION OF LAW, STATUTORY OR OTHERWISE, INCLUDING WARRANTIES, TERMS, OR CONDITIONS OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, SATISFACTORY QUALITY, CORRESPONDENCE WITH DESCRIPTION, AND NON-INFRINGEMENT, ALL OF WHICH ARE EXPRESSLY DISCLAIMED. U.S. ROBOTICS NEITHER ASSUMES NOR AUTHORISES ANY OTHER PERSON TO ASSUME FOR IT ANY OTHER LIABILITY IN CONNECTION WITH THE SALE, INSTALLATION, MAINTENANCE, WARRANTY, OR USE OF ITS PRODUCTS.

5.4 LIMITATION OF LIABILITY. TO THE FULL EXTENT ALLOWED BY LAW, U.S. ROBOTICS ALSO EXCLUDES FOR ITSELF AND ITS SUPPLIERS ANY LIABILITY, WHETHER BASED IN CONTRACT OR TORT (INCLUDING NEGLIGENCE), FOR INCIDENTAL, CONSEQUENTIAL, INDIRECT, SPECIAL, OR PUNITIVE DAMAGES OF ANY KIND, OR FOR LOSS OF REVENUE OR PROFITS, LOSS OF BUSINESS, LOSS OF INFORMATION OR DATA, OR OTHER FINANCIAL LOSS ARISING OUT OF OR IN CONNECTION WITH THE SALE, INSTALLATION, MAINTENANCE, USE, PERFORMANCE, FAILURE, OR INTERRUPTION OF ITS PRODUCTS, EVEN IF U.S. ROBOTICS OR ITS AUTHORISED RESELLER HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES, AND LIMITS ITS LIABILITY TO REPAIR, REPLACEMENT, OR REFUND OF THE PURCHASE PRICE PAID, AT U.S. ROBOTICS OPTION. THIS DISCLAIMER OF LIABILITY FOR DAMAGES WILL NOT BE AFFECTED IF ANY REMEDY PROVIDED HEREIN SHALL FAIL OF ITS ESSENTIAL PURPOSE.

6.0 DISCLAIMER:

Some countries, states, territories or provinces do not allow the exclusion or limitation of implied warranties or the limitation of incidental or consequential damages for certain products supplied to consumers, or the limitation of liability for personal injury, so the above limitations and exclusions may be limited in their application to CUSTOMER. When the implied warranties are not allowed by law to be excluded in their entirety, they will be limited to the TWO (2) YEAR duration of this written warranty. This warranty gives CUSTOMER specific legal rights, which may vary depending on local law.

7.0 GOVERNING LAW:

This Limited Warranty shall be governed by the laws of the State of Illinois, U.S.A. excluding its conflicts of laws principles and excluding the United Nations Convention on Contracts for the International Sale of Goods.

U.S. Robotics Corporation 935 National Parkway Schaumburg, IL, 60173 U.S.A



Regulatory Information

FCC Declaration of Conformity

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

This device may not cause harmful interference.

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

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. If this equipment is not installed and used in accordance with the manufacturer's instructions, it may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

Reorient or relocate the receiving antenna.

Increase the separation between the equipment and receiver.

Connect the equipment to 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.

The use of shielded cables for connection of the monitor to the graphics card is required to assure compliance with FCC regulations. Modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

Detachable Antenna Information

FCC Part 15, Subpart C, Section 15.203 Antenna requirement

USR 5417 users: An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section. The manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.

FCC Radiation Exposure Statement

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20 cm between the radiator and your body.

UL Listing/CUL Listing

USR 5417 users:

This information technology equipment is UL-Listed and CUL-Listed for use with UL-Listed personal computers that have installation instructions detailing user installation of card accessories.

USR 5411 users:

This information technology equipment is UL-Listed and CUL Listed for the uses described in the User Guide. This product is for use only with UL Listed laptop or notebook computers

Industry Canada Statement

This equipment complies with the Industry Canada Spectrum Management and Telecommunications policy, RSS-210, standard Low Power License-Exempt Radio Communication Devices.

Operation is subject to the following two conditions:

1. This device may cause interference.

2. This device must accept any interference, including interference that may cause undesired operation of the device.

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CE Declaration of Conformity

We, U.S. Robotics Corporation of 935 National Parkway, Schaumburg, Illinois, 60173-5157,USA, declare under our sole responsibility that the U.S. Robotics USR5411 Wireless *MAX*g PC Card and the U.S. Robotics USR5417 Wireless *MAX*g PCI Adapter to which this declaration relates is in conformity with the following standards and/or other normative documents:

EN300 328-2

EN301 489-1

EN301 489-17

EN60950

This equipment is in compliance with the European recommendation 1999/519/ECC, governing the exposure to the electromagnetic radiation.

We, U.S. Robotics Corporation, hereby declare that this product is in

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compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC.

This product can be used in the following countries:

Germany, Austria, Belgium, Switzerland, Netherlands, Luxembourg, Italy, France, UK, Ireland, Spain, Portugal, Sweden, Norway, Denmark, Finland, Czech Republic, Poland, Hungary, and Greece

Regarding IEEE 802.11g we currently have the following information about restrictions in the R&TTE countries:

Country	Frequency band	Output power	
France	2454-2483.5 MHz	10 mW EIRP outdoor	

Regulatory Channel Frequency

Channel	Frequency (MHz)	FCC	Canada	ETSI
1	2412	X	X	X
2	2417	X	X	X
3	2422	X	X	X
4	2427	X	X	X
5	2432	X	X	X
6	2437	X	X	X
7	2442	X	X	X
8	2447	X	X	X
9	2452	X	X	X
10	2457	X	X	X
11	2462	X	X	X
12	2467			X
13	2472			X
14	2484			

EU Health Protection

This device complies with the European requirements governing

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exposure to electromagnetic radiation. This equipment should be installed and operated with minimum distance 20 cm between the radiator and your body. This wireless device is a transmitter/receiver and has been designed and manufactured to comply with the exposure limits recommended by the Council of the European Union and the International Commission on Non-Ionizing Radiation Protection (ICNIRP, 1999) for the entire population. The exposure standard for portable equipment uses the "Specific Absorption Rate" as unit of measure. The maximum SAR value of this wireless device measured in the conformity test is X.XX W/kg.

EU Detachable Antenna Information

USR5417 Users: This U.S. Robotics wireless device has been designed to operate with the antenna included in this package only. Together this device and antenna combination has been tested and approved by a European Agency conforming with the European R&TTE directive 1999/5/EC to meet the radiated power level requirement of 100mW e.i.r.p. Replacement of this antenna must only be done with an authorized U.S. Robotics component that has been designed and tested with the unit to the requirements of directive 1999/5/EC. Please refer to the U.S. Robotics Web site to get product antenna ordering information.

	IEEE 802.11g compliant
Operating Channels:	11 channels (US, Canada)
	13 channels (ETSI)

Go to <u>www.usr.com</u> to see the most recent channel restriction information.

Manufacturer's Disclaimer Statement

The information in this document is subject to change without notice and does not represent a commitment on the part of the vendor. No warranty or representation, either expressed or implied, is made with respect to the quality, accuracy, or fitness for any particular purpose of this document. The manufacturer reserves the right to make changes to the content of this document and/or the products associated with it at any time without obligation to notify any person or organization of such changes. In no event will the manufacturer be liable for direct, indirect, special, incidental, or consequential damages arising out of the use or inability to use this product or documentation, even if advised of the possibility of such damages.



PC Card Installation

Go to the appropriate set of instructions depending on if you are installing both a Wireless MAXg PC Card and a Wireless MAXg Router or installing just a Wireless MAXg PC Card.

Installing BOTH a Wireless MAXg Router and the Wireless MAXg PC Card

Step One: Connect the Wireless MAXg Router

 Turn off your computer and your cable or DSL modem. Disconnect the Ethernet cable from the Network Interface Card (NIC) of your computer, but leave it connected to your cable or DSL modem.



- Connect the Ethernet cable from your cable or DSL modem or network connection to the WAN port of the Wireless MAXg Router.
- III. Connect an Ethernet cable to the Network Interface Card (NIC) of your computer and to one of the LAN ports of the Wireless

MAXg Router.

- IV. Connect the antenna to the Wireless MAXg Router.
- V. Connect the power adapter to the Wireless *MAX*g Router and to a standard wall power outlet. Make sure your computer is turned on.

Note to UK Users: Attach the correct power plug to the power adapter.



Note: Some cable or DSL modems can be connected using either a USB cable or an Ethernet cable. To connect your cable or DSL modem to the Wireless *MAX*g Router, you must use an **Ethernet cable**.

Step Two: Install the Wireless MAXg PC Card and drivers

- Locate an available PC Card slot and fully insert the Wireless MAXg PC Card. PC Card slots are typically on the side of laptops. You should hear a beep when the Wireless MAXg PC Card is fully inserted and detected.
- II. When Windows detects the new hardware, click Cancel. Insert the Installation CD-ROM into your CD-ROM drive. The Installation CD Graphical User Interface (GUI) will appear on your screen. If prompted, select your preferred language.

Note: If your CD-ROM does not automatically launch, click Windows **Start**, **Run**, type **D:\setup** (if your CD-ROM drive uses a different letter, type that letter in place of "D"), and click **OK**.

- III. Some files will be copied to your system, and then you will be asked to read the license agreement. Read the agreement and click **Yes**. Select your product and then click **Software**.
- IV. Click **Wireless Card Utility and Drivers**. Follow the on-screen instructions.

Note: You will need to install this Installation CD-ROM on all the PCs you plan to wirelessly network together.

V. If prompted, restart your computer.

Step Three: Setup Wireless Networking

- I. When you are prompted, select **Configure a new USR5461 Router** and click **Next**. You will need to wait while the PC Card communicates with the router.
- Select your Internet Connection type and click Next. Depending on the type of Internet Connection that you choose, you may need to enter some additional information.
- III. Enter a Network name and a Pass phrase (also known as network key) (a minimum of eight characters) for your wireless encryption and click Next. You will need to wait while the router and the PC Card are configured.
- IV. When prompted, enter a User name and Password for the router and then click Next. Wait while the configuration continues.
- V. You will then see a screen that shows you the settings for your Wireless MAXg Router. When you are finished looking at this information, click **Finish**. Your Wireless MAXg Router and PC Card should all be configured and ready for use. If you experience any problems, refer to the Troubleshooting section in the User Guide on the Installation CD-ROM.
- VI. When you are finished configuring the basic connection settings, you should have Internet access. To confirm your connection, launch a Web browser and register your product at

www.usr.com/productreg If the page loads, you are finished with the installation procedure. If the page does not load, refer to the Troubleshooting section.

If you experience any problems connecting to a wireless networking device, refer to the Troubleshooting section in this guide or to the Configuration section of the User Guide on the U.S. Robotics Installation CD-ROM for more information.

It is recommended that you enable WEP so that your wireless network is secure. Make sure you assign the same secret WEP key to all your wireless devices to ensure future connectivity. For more information about this and additional wireless parameters, refer to the User Guide on the U.S. Robotics Installation CD-ROM.

Congratulations!

You have finished installing your hardware and your drivers! The Wireless *MAX*g PC Card will connect to an existing wireless network or other wireless networking products in the area.

Launch Configuration Utility

You should now see a small icon for the Configuration Utility in the system tray by your clock on your computer desktop. Right-click the icon and click **Open Utility**.

The Configuration Utility is used to change or verify the configuration information that relates to your Wireless *MAX*g PC Card. The Configuration Utility icon will be colored to indicate the status of your wireless network: red for disconnected or connected with poor quality, yellow for roaming, and green for connected with good quality.

Installing just the Wireless MAXg PC Card

Step One: Install the Wireless MAXg PC Card and drivers

- Locate an available PC Card slot and fully insert the Wireless MAXg PC Card. PC Card slots are typically on the side of laptops. You should hear a beep when the Wireless MAXg PC Card is fully inserted and detected.
- II. When Windows detects the new hardware, click Cancel. Insert the Installation CD-ROM into your CD-ROM drive. The Installation CD Graphical User Interface (GUI) will appear on your screen. If prompted, select your preferred language.

Note: If your CD-ROM does not automatically launch, click Windows **Start**, **Run**, type **D:\setup** (if your CD-ROM drive uses a different letter, type that letter in place of "D"), and click **OK**.

- III. Some files will be copied to your system, and then you will be asked to read the license agreement. Read the agreement and click Yes. Select your product and then click Software.
- IV. Click **Wireless Card Utility and Drivers**. Follow the on-screen instructions.

Note: You will need to install this Installation CD-ROM on all the PCs you plan to wirelessly network together.

V. If prompted, restart your computer.

Step Two: Setup Wireless Networking

- When you are prompted, select Connect to an established wireless router and click Next. You will need to wait while the PCI Adapter communicates with the router.
- II. A list of available networking products will appear on the "Connect to Wireless Networking" screen.

III. Double-click the appropriate wireless networking device and click Next.

Note: If you are looking for a specific wireless networking device and do not see it listed, click **Detect** and your Wireless *MAX*g PCI Adapter will search the area again for available wireless networking devices.

- IV. After selecting a wireless networking device, configuration information for that device will appear. If the network specified is not secure, the "Install Complete" screen will appear. Click **Finish**. If you have specific security settings enabled on the device you will be connecting to, such as WEP or WPA2, you will need to select your security type and click **Next**. Enter the appropriate security information on the next screen and click **Next**.
- V. You will then need to enter the **User name** and **Password** for the wireless device you are connecting to. After entering these, click **Next**.
- VI. When prompted, select Yes, I want to restart my computer now. and click Finish.

If you experience any problems connecting to a wireless networking device, refer to the Troubleshooting section in this guide or to the Configuration section of the User Guide on the U.S. Robotics Installation CD-ROM for more information.

It is recommended that you enable WEP so that your wireless network is secure. Make sure you assign the same secret WEP key to all your wireless devices to ensure future connectivity. For more information about this and additional wireless parameters, refer to the User Guide on the U.S. Robotics Installation CD-ROM.

Congratulations!

You have finished installing your hardware and your drivers! The Wireless *MAX*g PC Card will connect to an existing wireless network or other wireless networking products in the area.

Launch Configuration Utility

You should now see a small icon for the Configuration Utility in the system tray by your clock on your computer desktop. Right-click the icon and click **Open Utility**.

The Configuration Utility is used to change or verify the configuration information that relates to your Wireless *MAX*g PC Card. The Configuration Utility icon will be colored to indicate the status of your wireless network: red for disconnected or connected with poor quality, yellow for roaming, and green for connected with good quality.



Configuration Utility

The Configuration Utility can be used to change the settings of the Wireless *MAX*g PC Card or PCI Adapter. In this section of the User Guide you can read about the different ways to open the Configuration Utility, how to create a wireless connection, and a brief overview of the areas within the Configuration Utility.

Launch the Configuration Utility

You should now see a small icon for the Configuration Utility in the system tray by your clock on your computer desktop. There are a few ways to access the Configuration Utility and create a wireless connection.

- Right-click the Utility icon and click **Open Utility**.
- Left-click once on the Utility icon to open the quick connect screen. In the quick connect screen, you can select an available network and enter the Network key, if applicable. Click Connect to establish a wireless connection. You can also click Advanced to open the full Configuration Utility.

The Configuration Utility is used to change or verify the configuration information that relates to your Wireless MAXg PC Card. The Utility icon will be colored to indicate the status of your wireless network: red for disconnected or connected with poor quality, yellow for roaming, and green for connected with good quality.



I am no longer able to access the Internet.

When your computer connects to the Internet, a number of devices have to work together.

- A. Your computer connects to your Wireless *MAX*g Router via a wireless or wired connection.
- B. Your Wireless *MAX*g Router connects to your broadband cable/DSL modem via an Ethernet cable.
- C. Your cable/DSL modem connects to your Internet Service Provider (ISP) via your cable/phone network.



The first step in solving this problem is to diagnose the cause. There are a number of places where the connection from your computer to the Internet might fail.

First, check the indicator lights of your various devices. If one or more of these devices indicate a problem, it 's a good indication of where you should focus your troubleshooting efforts. If your computer uses a wireless connection to your router, does the wireless utility indicate there is a good connection to your router?

If your computer cannot communicate with the router, it cannot access the Internet.

2. Are your Wireless *MAX*g Router 's LEDs for power, wireless, and Internet lighted?

If the router is turned off, or the wireless radio isn 't operating, or it has no connection to the Internet (via your cable/DSL modem), your computer won 't be able to access the Internet either.

3. Do your cable/DSL modem 's power and status LEDs indicate a connection? (Please refer to your modem 's documentation for information on its status indicators.)

If your modem is turned off or cannot communicate with your ISP, your router will be unable to access the Internet.

Now, let 's step through the various devices and determine which one isn 't connecting properly.

Step 1: Can your computer connect to your Wireless MAXg Router?

If you use a wired connection:

If you use a wired connection between your computer and your Wireless *MAX*g Router, ensure the Ethernet cable is connected to your computer 's LAN port and to a LAN port on the router and that the corresponding LEDs are lighted.

If you use a wireless connection:

If you have a wireless connection to your Wireless *MAX*g Router, does your wireless utility report a successful connection to your router?

If your wireless utility reports a successful wireless connection, it 's

possible that your computer has connected to a neighbor 's router instead of yours. You can use your wireless utility to check the network name (SSID) of the router you 're connected to. If it 's connected to the wrong router, you can use the utility to force your computer to try to connect to your router. (Please refer to the documentation of your wireless adapter.)

If you do not have a connection to your Wireless *MAX*g Router, you can try the following solutions:

1. Ensure that your computer is close enough to your router to receive a signal and that there is nothing interfering with the signal, such as a microwave oven or a concrete wall.

If your router broadcasts its network name, you can use your computer 's wireless utility to scan for it. (This is typically called a "site survey.") If your utility can 't detect your router, it may be a signal problem.

2. Ensure that the wireless utility is using the correct network name and security settings for your router.

Settings such as network name, security method (WPA, WEP, etc.), and security keys must all match. If your router is using WPA encryption, each wireless card or adapter must support WPA encryption. If you are using a Wireless PC Card, PCI adapter, or USB adapter that does not support WPA encryption, you will not be able to connect to the Wireless *MAX*g Router and will need to use WEP encryption. Please refer to the Configuration section of this User Guide for information on changing the security settings.

3. If you have enabled MAC filtering, is this computer permitted to connect to your router?

Please note that MAC filtering refers to specific wireless adapters. If you use MAC filtering and you 've changed wireless adapters, you will have to add the MAC address of the new wireless adapter to the router.

You 've probably noticed that you need to access your Wireless *MAX*g Router in order to check some of these things. We' II do that in the next step.

If none of these work, you can try a wired connection between your computer and your router by connecting an Ethernet cable between your computer 's LAN port and a LAN port on the router. (Ensure that the corresponding LAN port LEDs are lighted.) If a wired connection works, the problem is almost certainly with your computer 's wireless connection to the router. You should then try the previous steps again.

If you have a connection between your computer and your Wireless *MAX*g Router, it 's likely the router is not connected to the Internet or is not functioning correctly.

Step 2: Is your Wireless MAXg Router responding?

If you have a wireless or wired connection to your Wireless *MAX*g Router, open your Web browser to the router 's address: http://192.168.2.1 (Please note that if you 've modified the router 's LAN IP address, you should use the new one.)

If the Wireless *MAX*g Router 's Web interface doesn 't appear, your computer may need to re-establish a connection to your router:

1. Release and renew your computer 's network connection.

Windows XP, 2000, and NT users: Press Start and select Run. Type cmd and press ENTER. Type ipconfig /renew and press ENTER. Type exit and press ENTER.

Windows Me, 98, and 95 users: Press Start and select Run. Enter winipcfg and press ENTER. Press Release. Press Renew. Close the application.

Your computer should acquire an IP address (such as 192.168.2.5) from the router.

2. Try to access the router 's Web address at

http://192.168.2.1

If the Wireless *MAX*g Router 's Web interface doesn 't appear, the router may need to be restarted:

1. With a thin tool, such as a paper clip, briefly press the RESET button on the back of the router.

Note: If you press the RESET button for more than five seconds, the router will return to its factory default settings.

- 2. Wait about 30 seconds.
- 3. Release and renew your computer 's network connection. (See above for details.)
- Try to access the router 's Web address at http://192.168.2.1

If you still cannot access the Wireless *MAX*g Router, the router may need to be restored to the default factory settings. (Please note that you will lose all of your router 's custom settings and will need to set it up again as if you were installing it for the first time. Alternatively, if you ' ve made a backup of the settings, you will be able to restore them.)

- 1. With a thin tool, such as a paper clip, press the RESET button on the back of the router for at least five seconds.
- 2. Wait about 30 seconds.
- 3. Try to access the router 's Web address at http://192.168.2.1

If the Wireless *MAX*g Router 's Web interface still doesn 't appear, it 's possible that the router has failed. Please contact U.S. Robotics Customer Support.

If the Wireless *MAX*g Router 's Web interface appears, the problem may be with its connection to your cable/DSL modem.

Step 3: Can your Wireless MAXg Router

connect to your cable/DSL modem?

Now that you have accessed your Wireless *MAX*g Router 's Web interface, go to the **Status** page.

There should be a statement at the top of the page indicating whether the router is connected to the Internet.

Sample screenshot of a router connected to the Internet:

Sample screenshot of a router not connected to the Internet:



You can confirm that statement by checking the **Status** page's WAN section to see if the router has a WAN IP address (such as 235.42.181.5). This IP address indicates whether the router is connected to the cable/DSL modem.

If the router doesn 't have a WAN IP address, select the router 's

Internet page and use it to configure the router 's Internet connection. (If you have a DSL modem, you may be required to enter the login information your ISP provided.)

If the Wireless *MAX*g Router still cannot obtain a WAN IP address, it is likely there is a problem with the cable/DSL modem or your ISP.

Step 4: Can your cable/DSL modem connect to your ISP?

If your computer has a connection to your Wireless *MAX*g Router and the router 's Internet connection is configured correctly, but the router cannot connect to the Internet, it 's possible that the cable/DSL modem has lost its connection or isn 't functioning properly, or there 's a problem with your ISP.

- Ensure that an Ethernet cable is connected between your router 's WAN port and the cable/DSL modem 's Ethernet port and that the corresponding LEDs are lighted.
- Ensure that your cable/DSL modem is connected to your wall jack. (A cable modem uses a coax cable, and a DSL modem uses an RJ-11 cable.)
- Restart the cable/DSL modem. (There may be a power switch or reset button on the modem or you may have to unplug/re-plug the modem 's power adapter. Consult your modem 's documentation.)
- 4. After the cable/DSL modem has restarted and connected to your ISP, click the **Renew** button on your router 's **Status** page.



5. After the router has finished releasing and renewing its WAN IP address, click **Continue** to return to the **Status** page.

If your Wireless *MAX*g Router now says it 's connected to the Internet and has an IP address, try to access the Internet. If you still cannot access the Internet, please start at the beginning of this tutorial to determine the new point of failure. (It 's possible that your wireless connection needs to be re-established.)

If the Wireless *MAX*g Router still does not have an IP address, the problem may be with the cable/DSL modem or your ISP. Please contact your ISP 's Customer Support.



I cannot achieve MAXg (125 Mbps) connections to a Wireless MAXg Router.

Possible Solution:

Make sure you have *MAX*g enabled for the **Acceleration** option in the Wireless section of the Wireless *MAX*g Router's Web User Interface. This can be found in the Transmission area in the Wireless section. Launch the Web User Interface, click the **Wireless** tab, and manually set the **Acceleration** to *MAX*g within the Transmission area.

Transmission			
These are advanced settings and most people won't need to modify them. You can find information about these advanced features in the user manual on the installation CD-ROM.			
Power level:	100%		
Channel:	11 💌		
54g mode:	Automatic 💌		
Automatic 54g protec	tion		
Supported rate:	Auto 💌		
Basic rate set:	Default 💌		
Acceleration:	MAXg (125 Mbps)		
Beacon interval:	100 ms (must be between 1 and 1000 ms)		
RTS threshold:	2347 (must be between 256 and 2432)		
Fragmentation threshold:	2346 (must be between 256 and 2346, even numbers only)		
DTIM interval:	3 (must be between 1 and 255)		
Preamble:	Long 💌		
When you finish entering your changes, press Save.			
Save			

Possible Solution:

Low link quality or range can be caused by environmental interference, such as lead-based paint and concrete walls. Try to move the antenna of the Wireless *MAX*g Router or to reposition the

file://D:\Data\USR\Certificate%20document\G-Force%20PC-PCI%20User%20Guide%2012... 2004/12/20

wireless clients to improve the link quality.

Possible Solution:

Some electronic devices, such as 2.4Ghz phones and microwave ovens, may interfere with the wireless signal and affect your wireless range and link quality. Try creating a wireless connection on a different channel.



I am unable to create a wireless connection to a Wireless MAXg Router.

Possible Solution:

Verify that you are using the same SSID, Channel, and Security information as the Wireless *MAX*g Router. Perform the following steps to verify and, if necessary, update the settings:

- Either right-click the Utility icon in the system tray and select Open Utility or left-click the Utility icon once and then click Advanced.
- 2. In the Wireless Networks screen, browse through the list of available wireless network devices and locate the correct Wireless *MAX*g Router. If you do not see the correct device, click **Refresh** to update the list. When you locate the correct Wireless *MAX*g Router, select it and then click **Configure**. If the correct device still does not appear, click **Add** under the Preferred networks section and manually update the appropriate information to create the entry.
- 3. When the Properties window appears, verify and, if necessary, update the appropriate connection and security information for the wireless network device. Make sure you do not have the checkbox next to **This is a computer-to-computer (ad hoc) network** selected. When you are finished, click **OK**.
- 4. On the main screen, click **Apply** and a connection will be established.



My computer does not create a wireless connection to a Wireless MAXg Router after I changed the settings.

Possible Solution:

In the Configuration Utility for your Wireless *MAX*g PC Card or PCI Adapter, ensure that you are connecting to the correct Wireless *MAX*g Router by verifying the MAC address, Network name (SSID), and security settings. The MAC address is located on the label on the bottom of the Wireless *MAX*g Router. Ensure that the correct Pass phrase and encryption option are being used. If you changed the settings in the configuration of the Wireless *MAX*g Router, you must also change the settings of every Wireless *MAX*g PC Card or PCI Adapter connecting to this network. The settings of the Wireless *MAX*g Router.



My Wireless MAXg Router is not appearing in the list when I wirelessly scan for it.

Possible Solution:

You may be on a computer that is too far away from the Wireless *MAX*g Router. Try moving closer to the Wireless *MAX*g Router and repeating the scan procedure.

Possible Solution:

Verify that you are using the same SSID, Channel, and Security information as set in the Wireless *MAX*g Router.

Possible Solution:

Using a wired connection, launch a Web browser. In the location or address line of your Web browser, type <u>http://192.168.2.1</u> to log in and access the Web User Interface. Go to the Wireless section and verify **Broadcast network name** is enabled on the Wireless MAXg Router.

Status Log Internet Security Firewall Wireless LAN De	vice		
Allow wireless connections	Saving Changes		
Network Name (SSID)	When you finish entering your changes, press the Save button at the bottom of the page.		
This is the name of your wireless network. Wireless devices will need to know the network name (also known as an SSID) of your router in order to communicate with it.	Wireless Connections		
Network name: USR5461	If you don't have any wireless devices at this time, you can disable wireless support for maximum security.		
In order to hide your router from new wireless devices, you can tell the router to stop broadcasting the router's network name. Network Name			
Broadcast network name	This can be any name you want. U.S. Robotics recommends that you treat your network name like a password and		
Access Point Isolation	use a combination of more than eight alphanumeric characters that is not easy to		
Access point isolation prevents wireless clients from sharing files and printers. This is useful in "Fish81Tree").			
situations such as public hotspots where the clients access the router for Internet access but they should not access each other. Broadcast			
Access point isolation	If the router broadcasts the network name, any wireless device can find out what it is		



After enabling VPN, I am unable to connect to local computers on my network to share files or printing capabilities.

Possible Solution:

Local network resources are not available when connected to some VPN clients. You may need to disable VPN.



I am experiencing poor link quality.

Possible Solution:

Low link quality or range can be caused by environmental interference, such as lead-based paint and concrete walls. Try to move the antenna of the Wireless MAXg Router or to reposition the wireless clients to improve the link quality.

Possible Solution:

Some electronic devices, such as 2.4Ghz phones and microwave ovens, may interfere with the wireless signal and affect your wireless range and link quality. Try creating a wireless connection on a different channel.



Troubleshooting Ping Procedure

If at any time during the ping procedure you do not receive a return message for a successful ping, this means that the address you are pinging has been changed and is causing a conflict or is no longer available. Check the address in the Web User Interface and make any necessary corrections using the console mode. After you have made the corrections, continue with the ping procedure.

Note: Linux users can perform steps 3 through 7 after opening a terminal.

- 1. Click Windows Start and then click Run.
- In the Run dialog box: Windows XP, 2000, and NT users: Type cmd and click OK. Windows Me, 98, and 95 users: Type command and click OK.
- 3. Type **Ping 127.0.0.1**. This is your local host address and this will ensure that the TCP/IP protocol is installed and functioning properly. If you cannot complete this ping, disconnect the Wireless *MAX*g Router and then repeat the installation procedure.
- 4. Type **Ping** followed by your IP address. This will ensure that your computer is responding to requests. If you cannot complete this ping, make sure all the cables are properly connected and that all the correct drivers are installed.
- Type **Ping** followed by your gateway address to check the communication with your gateway. The default gateway address is **192.168.2.1** This will ensure that you can connect to other

computers and get to the Wireless *MAX*g Router. If you can establish communication with the Wireless *MAX*g Router, you can access the Administration page and configure the settings. If you cannot complete this ping, make sure the power cord of the Wireless *MAX*g Router is plugged in and that it is properly connected to your computer.

- 6. Type **Ping** followed by the outside Internet address of your Wireless *MAX*g Router. This is the address that is provided either by your ISP or by the outside LAN. This procedure will ensure that your Wireless *MAX*g Router is functioning properly and allowing traffic to pass through.
- 7. Type **Ping** followed by your known DNS server address. This will allow you to resolve valid Internet host names to IP addresses and to verify that you can access the Internet.



Frequently Asked Questions

What can I do if the specified installation procedure did not work?

- 1. Try unplugging the power supply of your cable or DSL modem then plugging it back in to reset it.
- Restore the factory default settings of the Wireless MAXg Router. Press in and hold the RESET button for between five and ten seconds. This will reset the Wireless MAXg Router to the factory default settings. If you applied any personal configuration settings, you will need to make the changes again.

What type of cable do I need to use to connect my broadband modem to the Wireless *MAX*g Router?

Some types of broadband modems require that you use a cross-over cable to connect to the Wireless *MAX*g Router. Use the cables that were included with your Wireless *MAX*g Router and with your broadband modem. Contact your ISP if you are still uncertain about which type of cable you must use.

Does the Wireless MAXg Router support IPSEC?

Yes, the Wireless *MAX*g Router supports IPSEC pass-through.

What type of firewall is the Wireless *MAX*g Router equipped with?

The Wireless *MAX*g Router uses NAT and TCP/IP port forwarding.

What is NAT?

Network Address Translation (NAT) translates multiple IP addresses on the private LAN to one public address that is sent out to the Internet. This provides security since the IP address of a computer on the LAN is not transmitted to the Internet. The user can have multiple private addresses behind the single address that was provided by the ISP.

What is DMZ?

DMZ stands for Demilitarised Zone. This feature allows one IP address to be exposed to the Internet. DMZ allows only one computer to be exposed when multiple TCP/IP ports need to be open. If you want to use DMZ, you must set your computer with a static IP.

If DMZ is used, does the exposed user share the public IP with the Wireless *MAX*g Router?

No, all specific requests are forwarded to the DMZ host.

What should I do if I am unable to access my e-mail or the Web page of my ISP?

You should contact your ISP to get the full URL and then perform the following steps:

Note: Linux users can perform steps 4 and 5 after opening a terminal.

1. Connect your broadband modem directly to one of your computers.

- 2. Perform the ping command by clicking Windows **Start** and then **Run**.
- In the Run dialog box: Windows XP, 2000, and NT users: Type cmd. Windows Me, 98, and 95 users: Type command.
- All users should then enter the following command: ping xxx, where xxx is the complete URL for your ISP.
- After you get the IP address, enter the IP address in the mail server option or in the address line of your Web browser.

Are PPTP packets passed through or actively routed by the Wireless MAXg Router?

The Wireless *MAX*g Router does allow pass-through of PPTP packets.

What is the maximum number of users that the Wireless *MAX*g Router will allow?

If you attach additional hubs to the Wireless *MAX*g Router, up to 253 separate users can connect to the Wireless *MAX*g Router.

Is the Wireless *MAX*g Router compatible across different platforms?

Any platform that supports Ethernet, Wi-Fi compatible 802.11b and 802.11g products, and TCP/IP is compatible with the Wireless *MAX*g Router.

Will the Wireless *MAX*g Router allow me to use my own public IPs and domain, or do I have to use the IPs provided by the Wireless *MAX*g Router?

Only one valid Internet IP address is necessary. The internal IP address range will still go through the NAT firewall for all outbound Internet requests. All inbound requests will be blocked unless specific settings have been set up, such as port forwarding or DMZ.

How many ports can be forwarded at the same time?

You can forward up to 20 ports at the same time.

Can the Wireless MAXg Router be used in place of a modem?

No, the Wireless *MAX*g Router must be used with a broadband modem.

Is there a security log feature for the Wireless MAXg Router?

Yes, there is a security log feature in the **Log** page of the Web User Interface.



Support

Note: Your model number is 5461. You can find your serial number on the bottom label of the Wireless *MAX*g Router and on the side of the package. Write your serial number down. If you ever need to call our Technical Support department, you will need this number to receive assistance.

Are You Still Having Problems?

 Go to the Support section of the U.S. Robotics Web site at <u>www.usr.com/support</u>

Many of the most common difficulties users experience have been addressed in the FAQ and Troubleshooting Web pages for your specific product. The product number for the Wireless *MAX*g Router is USR5461. You may need to know this to obtain information on the U.S. Robotics Web site.

- Submit your technical support question using an online form at <u>http://www.usrcom/emailsupport</u>
- 3. Contact the U.S. Robotics Technical Support department.

Note: It is important that you have your serial number written down for future reference. If you ever need to call our Technical Support department, you will need this number, plus your model number, which is 5461, to receive assistance.

Support

Country	Voice	Online	Hours
United States	(888) 216- 2850	http://www.usr.com/emailsupport	9:00 A.M. - 5:00 P.M. Monday - Friday CST
Canada	(888) 216- 2850	http://www.usr.com/emailsupport	9:00 A.M. - 5:00 P.M. Monday - Friday CST

Country	Telephone	Online
Austria	07110 900116	http://www.usr.com/emailsupport/de
Belgium (Flemish)	+32 (0) 7 023 3545	http://www.usr.com/emailsupport/bi
Belgium (French)	+32 (0) 7 023 3546	http://www.usr.com/emailsupport/bi
Denmark	+45 70 10 4030	http://www.usr.com/emailsupport/ea
Finland	+358 981710015	http://www.usr.com/emailsupport/ea

France	+33 082 507 0693	http://www.usr.com/emailsupport/fr
Germany	0180 567 1548	http://www.usr.com/emailsupport/de
Hungary	0180 567 1548	http://www.usr.com/emailsupport/h
Ireland	+44 870 844 4546	http://www.usr.com/emailsupport/ul
Italy	+848 80 9903	http://www.usr.com/emailsupport/it
Luxembourg	+352 342 080 8318	http://www.usr.com/emailsupport/bi
Middle East/Africa	+44 870 844 4546	http://www.usr.com/emailsupport/m
Netherlands	0900 202 5857	http://www.usr.com/emailsupport/bi
Norway	+47 23 50 0097	http://www.usr.com/emailsupport/ea
Poland		http://www.usr.com/emailsupport/p

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Portugal	+351 (0) 21 415 4034	http://www.usr.com/emailsupport/p
Russia	8-800-200- 200-1	http://www.usr.com/emailsupport/ru
Spain	902 11 7964	http://www.usr.com/emailsupport/es
Switzerland	0848 840 200	http://www.usr.com/emailsupport/de
Sweden	+46 (0) 77 128 1020	http://www.usr.com/emailsupport/ea
United Kingdom	0870 844 4546	http://www.usr.com/emailsupport/ul

For current support contact information, go to the following Web site:

http://www.usr.com/emailsupport

For USR5411

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.

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.

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.

IMPORTANT NOTE:

FCC 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.

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

USR declared that USR5411 is limited in CH1~11 from 2400 to 2483.5 MHz by specified firmware controlled in USA.

This equipment has been SAR-evaluated for use in laptops (notebooks) with side slot configuration.

Industry Canada Statement

Operation is subject to the following two conditions:

1) this device may not cause interference and

2) this device must accept any interference, including interference that may cause undesired operation of the device

To prevent radio interference to the licensed service, this device is intended to be operated indoors and away from windows to provide maximum shielding.

Equipment (or its transmit antenna) that is installed outdoors is subject to licensing.

For USR5417

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.

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.

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.

IMPORTANT NOTE:

FCC Radiation Exposure Statement:

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

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

USR declared that USR5417 is limited in CH1~11 from 2400 to 2483.5 MHz by specified firmware controlled in USA.

Industry Canada Statement

Operation is subject to the following two conditions:1) this device may not cause interference and2) this device must accept any interference, including interference that may cause undesired operation of the device

This device has been designed to operate with an antenna having a maximum gain of 5 dBi.

Antenna having a higher gain is strictly prohibited per regulations of Industry Canada. The required antenna impedance is 50 ohms.

To reduce potential radio interference to other users, the antenna type and its gain should be so chosen that the EIRP is not more than required for successful communication.

To prevent radio interference to the licensed service, this device is intended to be operated indoors and away from windows to provide maximum shielding.

Equipment (or its transmit antenna) that is installed outdoors is subject to licensing.