

Wireless-N High Power USB Wi-Fi Adapter Quick Installation Guide

Introduction

The Wireless-N High Power USB Wi-Fi Adapter adds high speed wireless network connectivity to any USB port equipped computer.

Key Features and Benefits

- MIMO technology improves data throughput and range
- Supports 2.4GHz WLAN networks and complies with IEEE 802.11n/g/b
- Operating distance: up to 1000m line of sight (Max) depending on surrounding environment
- Supports WLAN security with WPA, WPA2, WEP (128/64) and WPS
- Advanced wireless encryption and wireless Multi Media (WMM) QoS technology
- Provides up to 300Mbps (download and upload) data transmission rate

System Requirements

- Laptop or desktop computer with an available USB port
- Windows[®] 8 (32-/64-bit) / 7 (32-/64-bit) / Vista (32-/64-bit) / XP (32-/64-bit) / Server 2003 & 2008 (32-/64-bit) / Server 2008 R2
- Mac OS X 10.6 or later

Package Contents

- Wireless-N High Power USB Wi-Fi Adapter
- USB cable
- Antennas (2)
- Software CD & quick installation guide

Layout



Figure 1: Layout

Windows Installation

WLAN AutoConfig Service

For Server 2008 & 2008 R2, WLAN AutoConfig Service needs to be enabled before driver installation. Follow the instructions below to enable the feature. For other Windows OSes, go directly to Driver Installation on next page.

- 1. Right click **Computer**, then click **Manage**.
- 2. Right click Features, then click Add Features.
- 3. Check the **Wireless LAN Service** box, then click **Next**.



4. Click **Install** then click **Close**.

Driver Installation

Connect the *USB Wi-Fi Adapter* to your computer using the included USB cable, then follow the instructions below to install the driver.

Windows 8 (32-/64-bit) / 7 (32-/64-bit) / Server 2008 R2

- 1. Insert the driver CD. Close CD autoplay window if prompted.
- Click Windows key and R, type D:\Windows\setup.exe, click OK. (Change D: to match your CD/DVD-ROM drive letter)
- 3. At the User Account Control, click **Yes**. For Server 2008 R2, skip this step.
- 4. At the Ralink Wireless LAN InstallShield, select I accept the terms of the licenses agreement, then click Next.
- 5. Make sure **Install driver and Ralink WLAN Utility** is selected, then click **Next**.
- 6. Click **Install**, then click **Finish**.
- 7. Restart the computer.

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Windows Vista (32-/64-bit) / XP (32-/64-bit) / Server 2003 (32-/64-bit) / Server 2008 (32-/64-bit)

- 1. Insert the driver CD. Close CD autoplay window if prompted.
- 2. Click **Cancel** at the Found New Hardware. Skip this step if not prompted.
- 3. Click **Start**, **Run**, type **D:\Windows**\ **setup.exe**, click **OK**. (Change D: to match your CD/DVD-ROM drive letter)
- 4. At the User Account Control, click **Allow**. Skip this step if not prompted.
- 5. At the Ralink Wireless LAN InstallShield, select I accept the terms of the licenses agreement, then click Next.
- 6. Make sure **Install driver and Ralink WLAN Utility** is selected, then click **Next**.
- 7. For XP and Server 2003, select **Ralink Configuration Tool**, then click **Next**. For other OSes, skip this step.
- 8. Click Install, then click Finish.
- 9. Restart the computer.

To Verify Windows Installation

 Go to Device Manager to verify installation. <u>For Windows 8 / Windows 7 / Windows XP /</u> <u>Server 2003</u>: Right click Computer or My Computer, click Manage, then click Device Manager.

For Windows Vista: Right click **Computer**, click **Manage**, click **Continue**, then click **Device Manager**.

For Server 2008 / Server 2008 R2: Right click **Computer**, click **Manage**, double click **Diagnostics**, then click **Device Manage**r.

 Double click Network adapters. A 802.11n Wireless LAN Card should be displayed.

Windows Wireless Network Configuration

After finishing the driver installation, use Windows Zero Configuration (WZC) <u>OR</u> Ralink Wireless Utility (RaUI) to connect to your wireless network. When WZC is chosen as the configuration tool, RaUI only provides monitoring functions, and vice versa. Right click the RaUI icon in the taskbar, then select **Use Zero Configuration as Configuration Utility** to configure by WZC, or select **Use RaConfig as Configuration Utility** to configure by RaUI. See Figure 3.

For Windows 8, Windows 7, Vista, WZC and RaUI can be used together and no need to do the selection before the connection.

For Server 2003, 2008 & 2008 R2, Windows Zero Configuration tool is better recommended.



Figure 3

WZC (recommended)

Right click the wireless network icon in the taskbar, then select **View Available Wireless Networks**.



Double click the preferred wireless network from the accessible network list. Type in the network key if required, click **Connect**, click **Connect Anyway**.

For advanced settings, click **Change advanced** settings, select tab **Wireless Networks**, then click **Properties**. See Figure 5& 6.



Figure 5

ieneral Wireless Networks Advanced		
Use Windows to configure my wireless net Available networks; To connect to, disconnect from, or find out about wireless networks in range, click the b	work settings nore information sutton below.	
Preferred networks: Automatically connect to available networks below: SING (Automatic)	in the order listed Move up Move down	Properties
Add Remove Proper	ties Advanced	
	K Cancel	

Figure 6

Select the Network Authentication and Data Encryption type, click **OK** to save the settings.



Figure 7

Ralink UI Double click the Ralink icon in the taskbar.



Search and connect to an available network

- 1. Click the **Available Networks** icon on the Ralink UI main menu.
- 2. At the prompted Available Networks list, click your preferred network, then click the **Connect** button.
- 3. At the prompted Profile Settings window, choose the Authentication and Encryption type, then click the **arrow** button.



Figure 9

4. Type in your WPA Preshared key, then click the arrow to the next step.

5. Once the network is connected, there will be a check next to the selected network.

View Link Information

- Once the wireless network is successfully connected, the RaUI icon turns to green R, and the Windows network shows connected.
- 2. Click the **Link Information** icon on the Ralink UI main menu to view the connection details.





Add Profile

- 1. Click the **Profile settings** icon on the Ralink UI main menu.
- 2. Click the **plus** button to add the profile, then click the arrow to the next step.

3. Follow the on-screen instructions to add a profile. Once the profile is added, it will be listed on the Profile list page.



Figure 11

Mac OS X Installation

- 1. Insert the driver CD, double click the **Drivers** icon on the desktop.
- 2. Double click **Mac** folder.
- 3. Double click **RTUSB D2870.dmg**.
- 4. At Introduction, click Continue.
- 5. At Installation Type, click Install or OK.
- 6. Type **Name** and **Password**, then click **OK** or **Install Software**.
- 7. Click **Continue Installation**, then click **Restart** to restart your computer.

Mac Wireless Network Configuration

Click the Ralink icon in the taskbar, click **Turn on internet sharing** for AP mode, click **Turn Off Internet sharing** for regular usage.





Search and connect to an available network

- 1. Click the **Site Survey** tab on the Wireless Utility main menu.
- 2. Click your preferred network from the networks list, then click the **Connect** button.



3. At the prompted window, select the Authentication and Encryption type, type in your WPA Preshared key, then click **OK**.

5540	Authentication Type	WPA2-PSK		*	
	Encryption Type	AES			 Encryptio
WEP SETTING	WPA Pre-Shared Key	SIIG1123	per recret mild		- WPA Pres
● Key #1	Hexadecimal	-			kev
○ Key #2	Hexadecimal	•)
○ Key #3	Hexadecimal	-			
○ Key #4	Hexadecimal	•			

Figure 14

 Once the connection is successfully established, check System Preferences-Network, the bullet in front of 802.11 n WLAN will turn to green. See Figure 15 on the next page.

	0 🔴	Network	
	Show All		٩
	Lo	cation: Automatic	÷
Green bullet before	802.11 n WLAN Connected 802.11dapter Not Connected	Status:	Connected 802.11 n WLAN is currently active and has the IP address 192.168.0.130.
802 11 n WLAN means	FireWire Not Connected	Configure IPv4:	Using DHCP
successful connection	PCI FiressCard	IP Address:	192.168.0.130
successful connection.	AirPort	Subnet Mask:	255.255.255.0
	• Off	Router:	192.168.0.2
		DNS Server:	192.168.0.2
		Search Domains:	
	+ - +-	t further changes.	(Advanced) ?

Figure 15

View Link Information

1. Click the **Link Status** tab on the Wireless Utility main menu to view the connection details. See **Figure 16.**

Status	SIIG <> 0	0-26-5A-C5-3	D-AB	
Current Channel	4 <> 242	7 MHz (Central)	Channel:6)	
Link Speed (Mbps)		TX 300.0	RX	6.0
Throughput (Kbps)		Тх 0.0	Rx	20.0
▶ Link Quality	Good 79%			dBm format
Signal Strength 1	Normal 65%			
Signal Strength 2	Normal 68%			
signal strength z				

Figure 16

Add Profile

- 1. Click the **Site Survey** tab on the Wireless Utility main menu.
- 2. Click your preferred network from the networks list, then click the **ADD PROFILE** button. See **Figure 13** on page 13.
- At the prompted window, complete the System Configuration and Authentication & Security Configuration, then click OK. See Figure 17 and 18 on next page.

Dennes Cardon Marda	Syster	1 Configurat	ion Au	thentication	& Security		
• CAM	Constant	iy Awake Mo	ode)	OPower	Saving Mode	2	
Netwo	ork Type	Infrastruct	ure 🔻		Tx Power	100	•
RTS Threshold		0					2347
Fragment Thresh	old	256					2346
		C	ОК	CANCEL			

Figure 17

	Authentication Type	WPA2-PSK			
	Encryption Type	AES 🔹			
	WPA Pre-Shared Key	SIIG1123			
WEP SETTING					
• Key #1	Hexadecimal 🔻				
○ Key #2	Hexadecimal 🔻				
○ Key #3	Hexadecimal 🔻				
○ Key #4	Hexadecimal 🔻				

Figure 18

4. Once the profile is successfully added, it will show on the **Profile** page.

Application



Desktop or notebook computer

Technical Support and Warranty

QUESTIONS? SIIG's Online Support has answers! Simply visit our web site at *www.siig.com* and click Support. Our online support database is updated daily with new drivers and solutions. Answers to your questions could be just a few clicks away. You can also submit questions online and a technical support analyst will promptly respond.

SIIG offers a 2-year manufacturer warranty with this product. This warranty covers the original purchaser and guarantees the product to be free of any defects in materials or workmanship for two (2) years from the date of purchase of the product.

SIIG will, at our discretion, repair or replace (with an identical product or product having similar features and functionality) the product if defective in materials or workmanship. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state. Please see our web site for more warranty details.

If you encounter any problems with this product, please follow the procedures below.

A) If it is within the store's return policy period, please return the product to the store where you purchased from.

B) If your purchase has passed the store's return policy period, please follow the steps below to have the product repaired or replaced.

Step 1: Submit your RMA request.

Go to www.siig.com, click Support, then REQUEST A PRODUCT REPLACEMENT to submit a request to <u>SIIG RMA</u> or fax a request to 510-657-5962. Your RMA request will be processed, if the product is determined to be defective, an RMA number will be issued.

Step 2: After obtaining an RMA number, ship the product.

- Properly pack the product for shipping. All accessories that came with the
 original package must be included.
- Clearly write your RMA number on the top of the returned package. SIIG will
 refuse to accept any shipping package, and will not be responsible for a product
 returned without an RMA number posted on the outside of the shipping
 carton.
- You are responsible for the cost of shipping to SIIG. Ship the product to the following address:

```
SIIG, Inc.
6078 Stewart Avenue
Fremont, CA 94538-3152, USA
RMA #:
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• SIIG will ship the repaired or replaced product via Ground in the U.S. and International Economy outside of the U.S. at no cost to the customer.

About SIIG, Inc.

Founded in 1985, SIIG, Inc. is a leading manufacturer of IT connectivity solutions (including Serial ATA and Ultra ATA Controllers, FireWire, USB, and legacy I/O adapters) that bridge the connection between Desktop/Notebook systems and external peripherals. SIIG continues to grow by adding A/V and Digital Signage connectivity solutions to our extensive portfolio. SIIG products offer comprehensive user manuals, many user-friendly features, and are backed by an extensive manufacturer warranty. High quality control standards are evident by the overall ease of installation and compatibility of our products, as well as one of the lowest defective return rates in the industry. SIIG products can be found in computer retail stores, mail order catalogs, through major distributors, system integrators, and VARs in the Americas and the UK, and through e-commerce sites.

PRODUCT NAME

Wireless-N High Power USB Wi-Fi Adapter

FCC RULES: TESTED TO COMPLY WITH FCC PART 15, CLASS B OPERATING ENVIRONMENT: FOR HOME OR OFFICE USE

FCC COMPLIANCE STATEMENT:

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.

THE PARTY RESPONSIBLE FOR PRODUCT COMPLIANCE SIIG, Inc. 6078 Stewart Avenue Fremont, CA 94538-3152, USA Phone: 510-657-8688

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