# 2.4/5GHz Dual band 433M 11ac USB Wireless Adapter



**User Manual** 

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## Chapter 1 Product Introduction

The product is a dual band 433M 802.11ac USB Wireless Adapter, backward compatible with 802.11a/b/g/n, it supports selectable 2.4GHz or 5GHz, adopting 1 × 1 MIMO (Multiple Input Multiple Output) architecture, 5G(802.11ac) up to 433 Mbps data rate, so you don't worry about interference from neighboring wireless devices and the plethora of household appliances that may interfere with their wireless signal, ensuring high-quality connections ideal for bandwidth-intensive applications such as HD video streaming and online gaming. Support WPS one key encryption, we only need to press the WPS button, can quickly and easily encrypted data transmission for wireless network, so as to prevent the invasion of illegal users.

#### **1.1 Product Features**

- > 2.4GHz or 5GHz dual frequency band wireless connection.
- Compatible with the latest IEEE802.11ac standard, backward compatible with 802.11a/b/g/n.
- Support 64/128bit WEP, WPA and WPA2 advanced security encryption.
- Support one key WPS encryption.
- ➢ USB 2.0 interface.
- Support Windows2000/XP/Vista/7/8, Mac, Linux operation system.

#### **1.2 Product Application**

The USB Wireless Adapter provides fast, reliable, low-cost solution for wireless access. The concrete application is as follows:

- Requiring more mobility of staff, they want to access the wireless network anywhere in a company.
- Due to construction or budget constraints, someplace are not suitable for LAN wiring, such as history, ancient buildings, the lease of land or temporary location.
- > Avoiding expensive cable, leased lines or right-of-way of the companies, individuals.

#### **1.3 Security Warning**

- > Please install and use this product until you complete to read this user manual.
- In order to guarantee the product to work correctly, please pay attention to the waterproofing and damp proofing.
- > Prevent some harmful substances (such as acid, alkali, etc.).
- > Please do not use this product placed directly in the sun or other sources of heat.
- If a failure occurs, please contact our customer service dept, do not open this product by yourself.

### 1.4 LED's Description

In the front of the wireless card, there is a status indicator. It will flash while a normal data communication.

### 1.5 WPS Button

You can set the wireless encryption just press the WPS button of equipment and the wireless router within two minutes at the same time.

### **1.6 Package Contents**

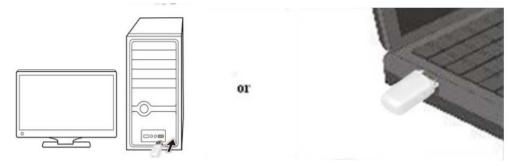
- Dual band 433M 11ac USB Wireless Adapter
- Use CD-ROM
- Warranty card

## **Chapter 2 Installation Guide**

This section will teach you how to use the CD-ROM software for the installation of your network card package, the package has been the driver, configuration software, which installs its configuration software will automatically install the driver.

This installation step to Windows XP Operating system as an example, other systems of the installation process, please refer to the related instructions in the operation system.

1. Please plug the wireless card into the computer's USB Interface. (Figure 1)





2. The **"Found New hardware Wizard"** dialog is coming here, we recommend you to select **"Cancel"** button, use the Quick Setup CD offered, we can help you to easily install the driver and configuration software, of course, you can also click **"Next"**, Manual installation. (Figure 2)



Figure 2

3. Before device installation, please install the software from the CD, Click on the **"Setup"** link to begin the installation. (Figure 3)



#### Figure 3

4. The Setup Program will detect automatically the install drivers and correct software by itself. The customer is according to "drive to install a guide to carry on to gradually install". (Figure 4, 5, 6, and 7)

REALTEK Wireless LAN Software - InstallShield Wizard	
Preparing Setup Please wait while the InstallShield Wizard prepares the setup.	No.
REALTEK Wireless LAN Software Setup is preparing the InstallShield Wizard, which you through the rest of the setup process. Please wait.	will guide
InstallShield	Cancel

Figure 4

REALTEK USB Wireless LAN	Driver and Utility	×
	REALTEK USB Wireless LAN Driver and Utility	
	The InstallShield Wizard will install REALTEK USB Wireless LAN Driver and Utility on your computer. To continue, click Next.	
< Back Next > Cancel		

Figure 5

REALTEK USB Wireless LAN Driver and Utility	<
Setup Status	
REALTEK USB Wireless LAN Driver and Utility is configuring your new software installation.	
Installing	
C:\WINDOWS\system32\REALPKT.VXD	
InstallShield Cancel	

Figure 6



Now installing REALTEK USB Wireless LAN Driver

#### Figure 7

5. Click on "Finish". The setup is already done. (Figure 8)

REALTEK USB Wireless LAN	Driver and Utility
	InstallShield Wizard Complete The InstallShield Wizard has successfully installed REALTEK USB Wireless LAN Driver and Utility. Before you can use the program, you must restart your computer. • Yes, I want to restart my computer now. • No, I will restart my computer later. Remove any disks from their drives, and then click Finish to complete setup.
	< Back Finish Cancel

Figure 8

### **Chapter 3 Connect Wireless Network**

1. When the Wireless Adapter driver has been successfully installed, an icon will appear in computer desktop as below figure.



#### Figure 9

2. Click the icon, the following interface will appear. (Figure 10)

REALTEK 11n USB W	ireless LAN Utility	
Refresh(R) Mode(M) Abou	ıt(A)	
🖃 🦞 MyComputer	General Profile Available Network Status Statistics Wi-Fi Protect Setup	
Realtek RTL8811		
	Status: Not Associated	
	Speed: N/A	
	Type: N/A	
	Encryption: N/A	
	SSID:	
	Signal Strength:	
	Link Quality:	
	Network Address:	
	MAC Address: 8C:88:2B:00:00:0F	
	IP Address: 0.0.0.0	
	Subnet Mask: 0.0.0.0	
	Gateway:	
	ReNew IP	
< >		
🛃 Show Tray Icon	Disable Adapter	Close
🔲 Radio Off	Windows Zero Config	

Figure 10

3. Select the **"Available Networks"** options, the interface will display all wireless networks that are available in your area. To connect to a network, simply highlight the wireless network name (SSID) and click **"Add to Profile"**. (Figure 11,12,13,14)

🙈 REALTEK 11n USB W	ireless LAN Utility	
Refresh(R) Mode(M) Abou	ıt(A)	
🖃 😼 MyComputer	General Profile Available Network Status Statistics Wi-Fi Protect Setup	
Realtek RTL8811	Available Network(s)	
	SSID Channel Encryption Network Authentication Signal	Туре
	Wait for searching	
		>
	Refresh Add to Profile	
<	Double click on item to join/create profile.	
✓ Show Tray Icon Radio Off	Disable Adapter	Close

Figure 11

REALTEK 11n USB Wireless LAN Utility		
ilable Network Status Statistics Wi-Fi Protect Setup		
s)		
Channel Encryption Network Authentication Signal Type		
CP 1 AES WPA Pre-Shared Key/ 68% Infrastr		
G 1 None Unknown 44% Infrastr		
5 None Unknown 44% Infrastr		
5 AES WPA Pre-Shared Key/ 60% Infrastr		
6 TKIP/AES WPA Pre-Shared Key/ 100% Infrastr		
(30 6 None Unknown 56% Infrastr		
11 AES WPA2 Pre-Shared Key 26% Infrastr		
13 AES WPA2 Pre-Shared Key 44% Intrastr		
Refresh Add to Profile		
n item to join/create profile.		
Disable Adapter		
G30     6     None     Unknown     56%     Infrast       11     AES     WPA2 Pre-Shared Key     26%     Infrast       (31     11     AES     WPA2 Pre-Shared Key     46%     Infrast       11     None     Unknown     46%     Infrast       11     None     Unknown     56%     Infrast       12     None     Unknown     60%     Infrast       13     AES     WPA2 Pre-Shared Key     44%     Infrast		

Figure 12

REALTEK 11n USB Wireless LAN Utility						
🖃 闍 MyComputer		Network Status	s Statistics \	Wi-Fi Protect Setup		
Realtek RTL8811	Available Network(s)					
	SSID	Channel	Encryption	Network Authentication	Signal	Туре
	10 HUAWEI-ALJECP	1	AES	WPA Pre-Shared Key/	68%	
	<sup>3</sup> SeaPai AP 2.4G	1	None	Unknown	44%	
	RTK 11n AP	5	None	Unknown	44%	
	1 <sup>3)</sup> zg	5	AES	WPA Pre-Shared Key/	60%	Infrastr
	1 <sup>20</sup> AP	_	TKIP/AES	WPA Pre-Shared Key/		Infrastr
	FullRiver WiFi X30	6	None	Unknown	56%	
	PR-XCF502	11	AES	WPA2 Pre-Shared Kev	26%	Infrastr
	🔊 FullRiver WiFi X31	11	AES	WPA Pre-Shared Key	48%	Infrastr
	🔊 Manhattan	11	None	Unknown	46%	Infrastr
	WIFI Music96	11	None	Unknown	56%	Infrastr
	♣ <sup>3</sup> MODECOM	12	None	Unknown	60%	Infrastr
	<b>I™</b> kant-test	13	AES	WPA2 Pre-Shared Key	44%	Infrastr
	<					>
	Re	fresh		Add to Profile		
	Note					
	Double click on ite	em to join/creat	e profile.			
Show Tray Icon		Disable Ad	lapter			Close
Radio Off		Alimeter un	Zero Config			0056

Figure 13

reless Network Prope				
Profile Name:	AP	802.1x configure		
Network Name(SSID):	AP	EAP TYPE :		
		GTC		×
		Tunnel :	Privision Mode :	
This is a computer-to access points are not	-computer(ad hoc) network; wireless t used.		<b>V</b>	~
Chappel	6 (2437MHz) 💌			
Chainnei.	0 (243/1412)	Username :		
-Wireless network secu	rity			
	a key for the following:	Identity :		
Netw	ork Authentication: WPA2-PSK			
	Data encryption: AES	Domain :		
ASCII PASS	SPHRASE	Password :		
Key index (advanced)	: 1 😽	Certificate :		
Network key:				~
*****		PAC : Auto Selec	t PAC	
Confirm network key:				
*****				
ОК	Cancel			

Figure 14

4. When the wireless adapter is connected to a wireless network is successful, the following screen will appear. (Figure 15)

🙈 REALTEK 11n USB W	ireless LAN Utility	
Refresh(R) Mode(M) Abou	ıt(A)	
🖃 😼 MyComputer	General Profile Available Network Status Statistics Wi-Fi Protect Setup	
Realtek RTL8811		
	Status: Associated	
	Speed: 150 Mbps	
	Type: Infrastructure	
	Encryption: AES	
	SSID: AP	
	Signal Strength: 100%	
	Link Quality:	
	100%	
	Network Address:	
	MAC Address: 80:88:28:00:00:0F	
	IP Address: 192.168.3.103 Subnet Mask: 255.255.0	
	Gateway: 192.168.3.1	
	Gateway, 152,100,3,1	
	ReNew IP	
🔽 Show Tray Icon	Disable Adapter	Close
🔲 Radio Off	Windows Zero Config	

Figure 15

## **Specification**

Standards and Protocols	IEEE 802.11a, IEEE 802.11b, IEEE 802.11g,	
	IEEE 802.11n, IEEE802.11ac	
Interface Type	USB 2.0 Standard, USB1.1 Compliant	
Frequency Band	<ul> <li>2.4 ~ 2.4835GHz</li> <li>5.15 ~ 5.25GHz</li> </ul>	
	11a: 6/9/12/18/24/36/48/54Mbps	
	11b: 1/2/5.5/11Mbps	
Transmission Rate	11g: 6/9/12/18/24/36/48/54Mbps	
	11n: up to150Mbps	
	11ac: up to 433Mbps	
Medulation Technology	DSSS with CCK, DQPSK, DBPSK	
Modulation Technology	OFDM with BPSK, QPSK,16-QAM, 64-QAM, 256-QAM	
Security	WPA2/WPA-PSK(AES,TKIP) WEP64,128BIT	
RF Power	9dBm (max)	
	11ac VHT80:-58dBm@10% PER, MCS9	
	11n HT40: -65dBm@10% PER, MCS7(2.4G)	
	11n HT20: -68dBm@10% PER, MCS7(2.4G)	
Sensitivity @PER	11n HT40: -67dBm@10% PER, MCS7(5G)	
	11n HT20: -70dBm@10% PER, MCS7(5G)	
	11g: -71dBm@10% PER, OFDM54M	
	11b: -84dBm@8% PER, CCK11M	
	11a: -73dBm@10% PER, OFDM54M	
LED Status	Link/Activity(blue)	
Dimensions (L x W x H)	42 x 19.5 x 10.3mm	
	Operating Temperature: 0°C ~40°C	
Environment	Storage Temperature: -20°C~70°C	
	Operating Humidity: 10%~90% non-condensing	
	Storage Humidity: 5%~95% non-condensing	

This device is indoor use only.

#### **FCC 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 or more of the following measures:

-- Reorient or relocate the receiving antenna.

-- Increase the separation between the equipment and receiver.

-- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

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

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.

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

The device has been evaluated to meet general RF exposure requirement. The device can be used in portable exposure condition without restriction.