

# HD Wireless 802.11 b/g/n USB Adapter

Model No. A150bgn



User Guide

## Safety Precautions

## Warning

Refer all repairs to the company from which you purchased the product or from the manufacturer. Any repairs made by the user may void the warranty.

# Safety Precautions

- Follow all warnings and instructions marked on the system and in this guide.
- Do not use liquid or aerosol cleaners. Instead, use a moderately damp cloth. (A cloth dampened with rubbing alcohol or window cleaner works well.).
- · Never spill liquid of any kind on the equipment.
- Send to a qualified service facility when repair is required.
- Contact customer service or refer servicing to a qualified facility if any of the following situations occur:
  - A. The USB plug is damaged.
  - B. The equipment has been exposed to water or other liquid (including rain and snow).
  - C. The equipment does not function properly after following the installation instructions.
  - The equipment has been dropped or the plastic casing has been Damaged.
- As with any electrical device, it is recommended you unplug this device during lightning storms in order to avoid damage.

# Getting Started

Thank you for purchasing the ReadyNet HD Wireless 802.11 b/g/n USB Adapter. If you are tired of messy wires connecting your laptop or desktop PC to an office or home network, this Wireless adapter is an ideal solution for providing access to wireless network and Internet connections. The ReadyNet Wireless Adapter is easy to install, setup and use.

## Unpacking

Carefully remove contents from the packaging. If there is any visible damage, do not operate; notify the shipper or dealer from which you purchased the product immediately. Please keep this user guide for future use.







## Package Contents

- 1-802.11 b/g/n Wireless USB Adapter
- 1- Printed User Guide
- 1- Adapter Installation CD

## Features

#### Muti-Mode:

IEEE 802.11 b, Up to 11 Mbps

IEEE 802.11 g, Up to 72 Mbps

IEEE 802.11 n, Up to 150 Mbps

## Security:

64/128 bit WEP, WPA, WPA2, WAPI

## Interface:

**USB 2.0** 

## **Driver Support:**

Windows 7, Vista, XP, 2000 (Included)

Mac OS X (Available at: www.phonex.com) Linux, Windows CE (Call Customer Support)

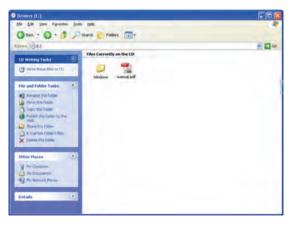
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# System Setup

#### Windows Driver Installation

To install the network adapter USB driver on a computer, please login to a user account having administrative rights before completing the following steps:

- 1. Place the installation CD in your PC CD/DVD drive.
- 2. Wait for the driver folder to open.



- 3. Find the appropriate driver for your operating system.
- Double click on the ReadyNet Driver (ReadyNet WLAN.exe) program icon, which is located in the driv-

er folder on the installation CD. example: "E:\Windows Driver\ ReadyNet WLAN.exe".

#### ReadyNet WLAN.exe

Follow the instructions and prompts provided by the "Installation Wizard" to complete the driver installation.







- Select "I accept the terms of the license agreements", then click the "Next" button.
- The next window allows you to select "Install driver only" or "Install driver and ReadyNet WALN utility", then click the "Next" button. Tip:
  - 1). Windows XP provides a "Wireless Zero Configuration" (WZC) service built into the operating system. Many wireless network adapter cards can utilize this service.
  - ReadyNet has provided a utility for setting up a wireless connection. If you choose to install this utility, you can switch between the Windows XP WZC service and the ReadyNet utility service at a later time.





c. If you chose to install the ReadyNet WLAN utility, the next window will allow you to choose whether you want to use the "ReadyNet Configuration Tool" or the "Microsoft Zero Configuration Tool", then click the "Next" button.



- d. This window allows you to go back and make changes to your choices, or click the "Install" button to confirm the installation. The installation progress will then be displayed.
- Click the "finish" to complete the driver installation.





## Wireless Adapter Installation

 After completing the driver installation you should see the following ReadyNet wireless utility icon in your Windows system Tray: Black RN with a Black Bar underneath (shown circled in Red).



Note: The Windows System Tray is usually found in the lower-right corner of your computer screen.

Plug the USB wireless adapter into the computer port that supports a USB 2.0/1.1 interface.

Note: Make sure you connect the wireless adapter directly to a USB port on your computer rather than to a USB hub. Although the adapter might work when connected to a USB hub, the likelihood of configuration problems will be greater.

3. The display will show the wireless utility icon in the Windows system tray. A pop-up message will indicate: "Found New Hardware" "802.11n USB Wireless LAN Card", then another pop-up message, "Found New Hardware" "Your New Hardware is Installed and Ready to Use". The ReadyNet wireless utility icon will



now display: White RN with a Red Bar underneath (shown circled in Red). A second wireless utility icon will also be displayed: A computer monitor with three waves emitting from the right and a Red X on the right side.

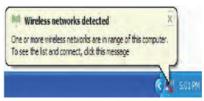
## Wireless Connection Setup

If the " Wireless Zero Configuration ( WZC)" service is used.

 If you chose to use the ReadyNet WLAN utility when you installed the software, you must right click on the ReadyNet utility icon, then select "Use Zero Configuration as Configuration utility".



The computer will disable the ReadyNet WLAN utility and enable Windows "Wireless Zero Configuration Utility". After the "WZC" utility loads, you should see something similar to the following pop-up above the windows system tray:



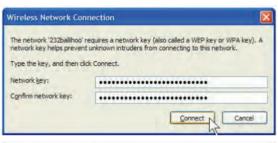
 Double click, or right-click on the "WZC" wireless utility icon and select "View Available Wireless Networks" to launch the utility. The Wireless Network Connection window will appear and display a list of all wireless networks within range of your wireless adapter.

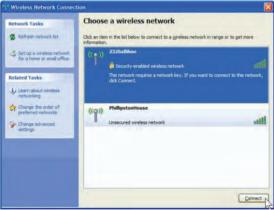


Note: Before configuring your Wi-Fi access, you need to have your network's SSID (service set identifier), security key and authentication type handy. Check the documentation coming with your router or ask your network administrator for the information.

- 4. If you don't see your network listed, click "Refresh network list" in the upper left corner. If you are locating within the valid range of hotspots or wireless routers, all available networks will be recognized and listed automatically. Click your preferred network, and then click "Connect" in the lower right corner.
- If the network security key has not been input, Windows XP prompts you to enter the network's security key to access the wanted SSID. Type the encryption key that you obtained earlier in both the Network key

and Confirm network key boxes, and then click "Connect".





## **Connection Tips**

If you are connecting to a free "Wi-Fi hotspot", simply select the network you want from the displayed list, then click Connect. Once a connection is made, you should be able to launch your Internet browser and connect to the Internet.

If you are connecting to a fee based "Wi-Fi hotspot", you must login to an account. This will require you to either enter your login information, if you're an existing customer, or create a new account and provide payment. Once the fee has been paid, select the fee based network and click on the Connect button. Your default web browser should launch taking you to the service provider's login page. Most Wi-Fi service providers have simple, step-by-step instructions to sign up and connect to their network. If once you connect to the network your web browser does not launch, simply launch your Internet browser manually and you will be taken directly to the login page.

If the " ReadyNet Wireless Connection Utility is used.

 After installation of the ReadyNet utility, the system displays a ReadyNet wireless utility icon in the Windows system tray, which is located in the bottom-right corner of your computer screen:



- Right-click on the ReadyNet wireless utility icon and select "Use RaConfig as configuration utility".
- The computer will disable the Windows "Wireless Zero Configuration Utility" and enable the ReadyNet WLAN utility.
- When a USB wireless adapter is inserted into one of the USB 2.0/1.1 ports of computer, the ReadyNet wireless configuration utility icon changes colors according to the wireless signal quality.



Moderate
Signal
Weak
Signal
Good
WEP

Double-click, or right-click the ReadyNet utility icon, then select "Launch Config Utility" to launch the utility, the ReadyNet utility window appears like:



- The ReadyNet utility shown above, provides profile management, available networks listing, statistical counter display, Wi-Fi multimedia (WMM), protected Wi-Fi setup, Cisco compatible extensions (CCX), call admission control (CAC), radio controls, ReadyNet driver/utility information, and help functions.
- For more details about the RaUI utility, please read the information in the help utility by clicking the "?" (Help) button found at the far right of the list of icons.



# Tips and Uses for Wi-Fi users

With a Wi-Fi connection, you can roam up to 150 meters around the access point (depending on the environment). You can easily transmit and receive and transmit files quickly within your local network. Big files can also be handled easily.

Access your email and surf the web with similar speeds as a wired network.

Synchronize data between devices.

Take advantage of wireless printing, you can send files directly from your laptop or desktop PC to a wireless printer using the Wi-Fi connection.

## **Battery Facts**

Wi-Fi offers greater speed and range than Bluetooth, but it drains your portable device batteries more quickly than Bluetooth. If you use a Wi-Fi connection regularly on your laptop PC or other portable device, you will notice that you need to recharge the battery more often. If you need to conserve battery life, on a long trip for example, turn off your Wi-Fi connection when you do not actually need it.

## Security

Because wireless networks rely on radio signals to transmit data, they are not as secure as a wired network. Wireless networks are susceptible to viruses and breaches like eavesdropping and need to be protected in order to be secure. There are many security measures to safeguard wireless networks, protect the data, and keep unau-

thorized users out. Hotspots, on the other hand, are often free of standard security practices in an effort to make it easy for anyone to connect. It may be found that some fee based hotspots administered by service providers offer some level of security; however, when using a hotspot, it's always a good idea to be proactive and to employ your own security measures.

## Terminology

<u>Wi-Fi</u>: Short for "Wireless Fidelity," a generic label that refers to wireless networks or networking.

<u>Hotspot</u>: A specific geographic location in which an access point provides public wireless broadband network services to mobile visitors through a wireless LAN.

<u>Throughput</u>: The amount of data transmitted in a set amount of time.

<u>Bandwidth</u>: the amount of data that can be carried from one point to another in a given time period (usually a second).

<u>Chipset</u>: A group of microchips that execute various functions.

Standards

Protocol and IEEE 802.11b/g or 802.11n

Interface

USB1.1. USB2.0

2 412~2 4835Ghz

Frequency Band

(Depends on different countries' regulation)

Data Rate

For 802.11n

1T1R, Peak rate: 150Mbps, Peak throughput: 90Mbps 1T2R, Peak rate: 300Mbps, Peak throughput: Rx

160Mbps

Transmit Power

(Typical) 802.11b: 19dBm; 802.11g:15dBm; 802.11n: 1/dRm

Data Security WEP 64/128 . WPA. WPA2, 802,1X

Power Consumption

It depends on different adapter models, there are two typical values: 330mA and 110mA in full Transmit (TX). 290mA and 95mA in full Receive (RX)

Transmission Distance

Indoor up to 100m, outdoor up to 300m (Standard transmission distance, it is affected depending on different environment).

Environment

Operating Temperature: 0°C~50°C Storage Temperature: -20~70°C

Operating Humidity: 10%~90% non-condensing Storage Humidity: 5%~95% non-condensing

Operating System

Supports Windows CE/2000/XP/Vista/7: Linux: Mac

OS X

# **Regulatory Information**

# **FCC Notice:**

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.

NOTE: 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.

Your USB WIFI is a radio transmitter and receiver. It is designed and manufactured not to exceed the emission limits for exposure to radiofrequency (RF) energy set by the Federal Communications Commission of the U.S. Government. These limits are part of comprehensive guidelines and establish permitted levels of RF energy for the general population. The guidelines are based on standards that were developed by independent scientific organizations through periodic and thorough evaluation of scientific studies. The standards include a substantial safety margin designed to assure the safety of all persons, regardless of age and health. The exposure standard for wireless mobile USB WIFIs employs a unit of measurement known as the Specific Absorption Rate, or SAR. The SAR limit set by the FCC is 1.6 W/kg. \*

Tests for SAR are conducted with the USB WIFI transmitting at its highest certified power level in all tested frequency bands. Although the SAR is determined at the highest certified power level, the actual SAR level of the USB WIFI while operating can be well below the maximum value. This is because the USB WIFI is designed to operate at multiple power levels so as to use only the power required to reach the network. In general, the closer you are to a wireless base station antenna, the lower the power output. Before a USB WIFI model is available for sale to the public, it must be tested and certified to the FCC that it does not exceed the limit established by the government adopted requirement for safe exposure. The tests are performed in positions and locations (e.g., at the ear and worn on the body) as required by the FCC for each model. The highest SAR value for this model USB WIFI when tested for use at the ear is 0.556 W/KgWhile there may be differences between the SAR levels of various USB WIFI and at various positions, they all meet the government requirement for safe exposure. The FCC has granted an Equipment Authorization for this model USB WIFI with all reported SAR levels evaluated as in compliance with the FCC RF exposure guidelines. SAR information on this model USB WIFI is on file with the FCC and can be found under the Display Grant section of http://www.fcc.gov/ oet/fccid after searching on FCC ID: Y2P-802NRUS.

Additional information on Specific Absorption Rates (SAR) can be found on the Cellular Telecommunications Industry Asso-ciation (CTIA) web-site at http://www.wow-com.com. \* In the United States and Canada, the SAR limit for mobile USB WIFI used by the public is 1.6 watts/kg (W/kg) averaged over one gram of tissue. The standard incorporates a sub-stantial margin of safety to give additional protection for the public and to account for any variations in measurements.

## One-Year Limited Warranty

The manufacturer warrants that for one year from the date of purchase this product is free from defects in materials and workmanship. If the item is defective within that period, return it, at your expense, to the dealer from whom it was purchased with proof of purchase. This warranty excludes defects of damage due to misuse, abuse or neglect.

## Contact Information

Company:Phonex Broadband

Toll Free: 1-855-200-1005

Address: 6952 High Tech Drive, Suite A

Midvale, UT 84047

Hours of Operation: 8 a.m. To 5 p.m. GMT