

Panda Wireless[®]

802.11n Wireless USB Adapter

User's Manual

Version 2.6

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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 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.

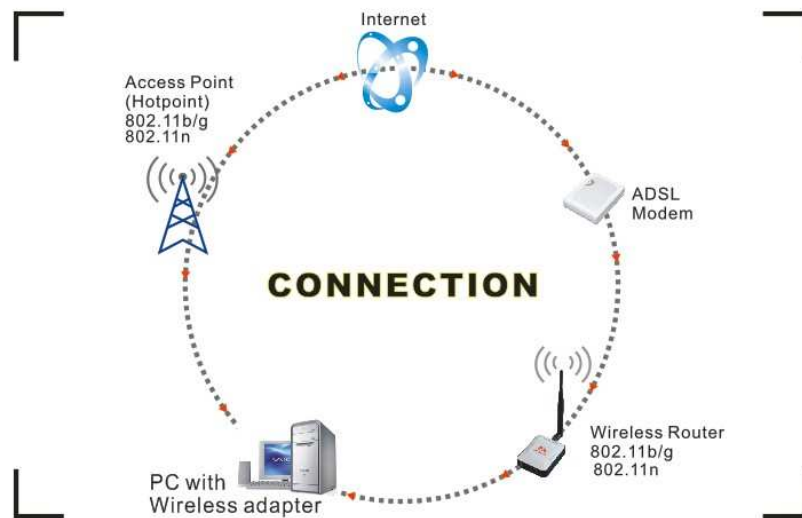
FCC Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

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

1. Introduction

Thank you for purchasing the Panda Wireless® 802.11n Wireless USB Adapter. Panda Wireless Adapter is easy to use and set up. If you are tired of dealing with all those messy wires to connect a laptop or PC to your office or home network, this Wireless adapter is an ideal access solution for wireless Internet connection.

A typical Internet access application for the USB wireless adapter is shown in the following diagram:



There are two different ways to access Internet:

1. With a wireless adapter, you can receive and transfer signal via a wireless router, then pass to a Cable/DSL modem, then to local ISP (Internet service supplier) through a telephone line.
2. With a wireless adapter, you can receive and transfer signal via local AP (Access Point) or so called WiFi Hotspot directly.

2. Package Contents:

- One Panda Wireless 802.11n Wireless USB Adapter
- An installation CD
- User's Manual

Product Warranty

Panda Wireless warrants to the end user (“Customer”) that this adapter will be free from defects in workmanship and materials, under normal use and service, for twelve (12) months from the date of purchase from its authorized reseller. Information in this document is subject to change without prior notice.

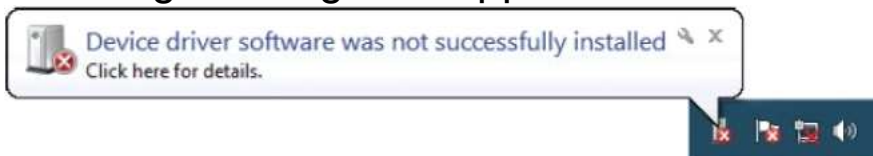
3. Driver Installation

To install the driver of the USB adapter, please log into a user account with the administrator’s privilege before you follow the installation instructions below:

Tips: Please upgrade your Windows computer to the latest Service Pack from Microsoft. For example, the latest Service Pack for Windows 7 is Service Pack 1. . Please send an email to support@pandawireless.com if you don’t know how to do it.

For Windows 7:

Once the wireless USB adapter is plugged into an USB port, the following message will appear on screen .



For Windows XP:

The system will detect that a new hardware has been added, and start the “**Found New Hardware Wizard**”. Then click on “**Cancel**”.

Please insert the CD into your CD-ROM drive. Go to the “Windows” folder that’s contained in the CD and double click on WinInstallerPandaUSBAdapterV1.x application.

Notes:

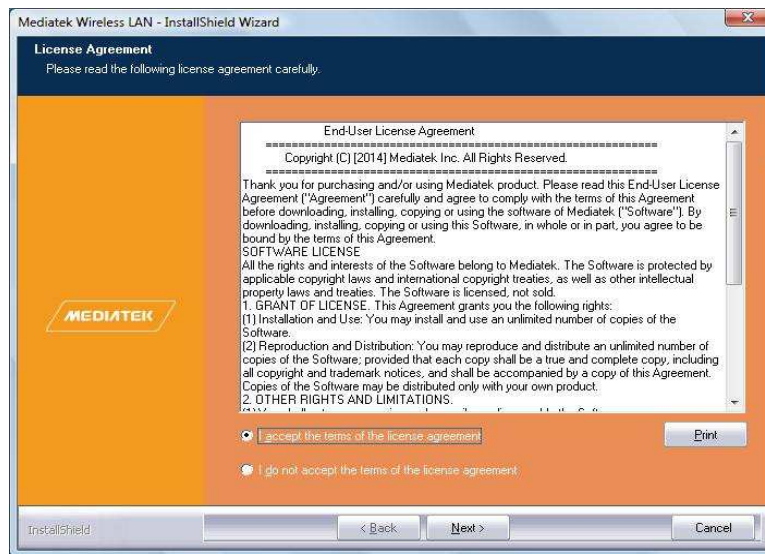
a) Due to frequent updates, the contents in the CD are probably outdated upon receipt. You can get the latest drivers and manuals on the Panda Wireless web site: www.pandawireless.com.

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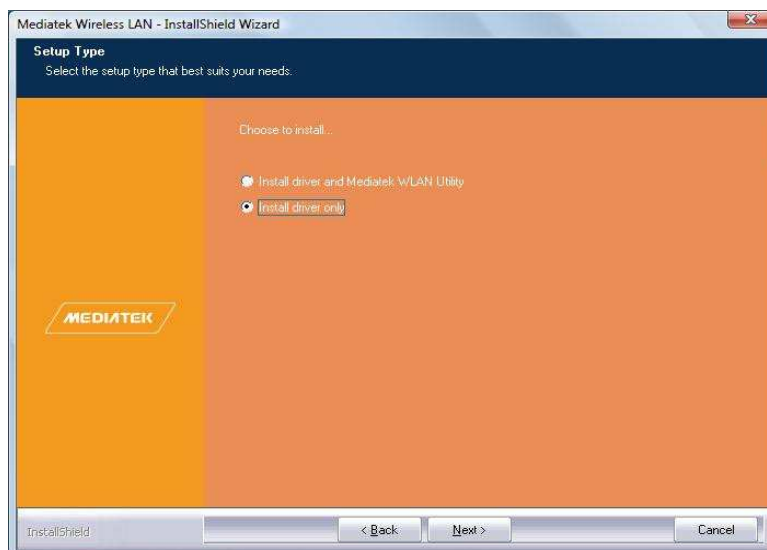
b) Some anti-virus/firewall software block Windows to load the drivers for the Panda adapter. i.e. Zone Alarm, AVG, AVast, Kaspersky, Bit Defender, etc. You need to uninstall the software before you install a driver for the Panda adapter.

1) Follow the instructions and prompts of the “**Install Shield Wizard**” to finish the driver installation:

a. Select the “**I accept the terms of the license agreement**” and then click the “**Next**”.



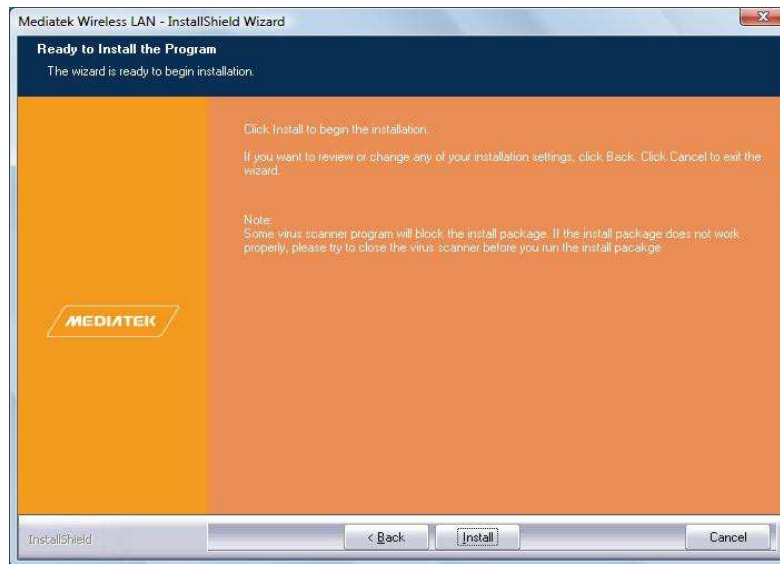
b. Select “**Install Driver Only**” and click “**Next**”



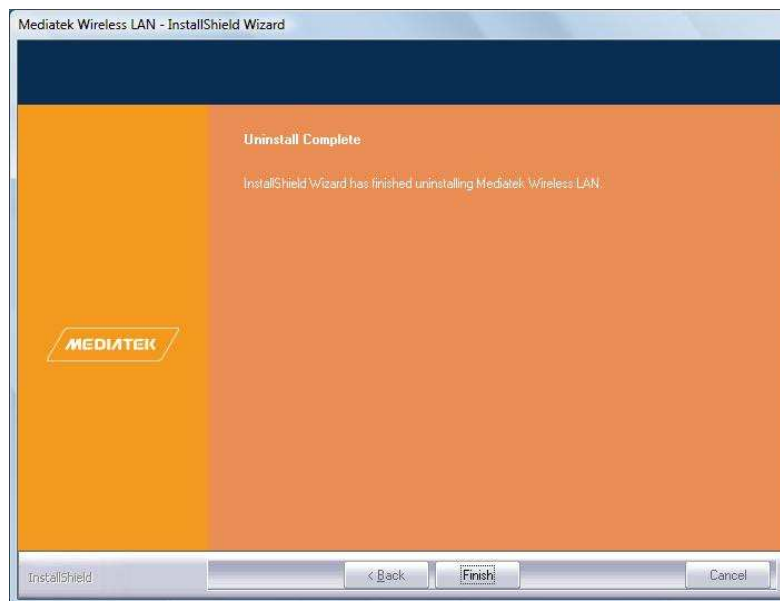
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Note: Select “Install driver and WLAN Utility” if you want to set up your computer as a WiFi Hotspot/WiFi repeater with the Panda adapter.

c. Click the “**Install**” to confirm the installation and then wait a while.



d. Click “**Finish**” to finish the driver installation.




4. How to connect to your own wireless network

Plug the Panda adapter into one of the USB ports of your computer

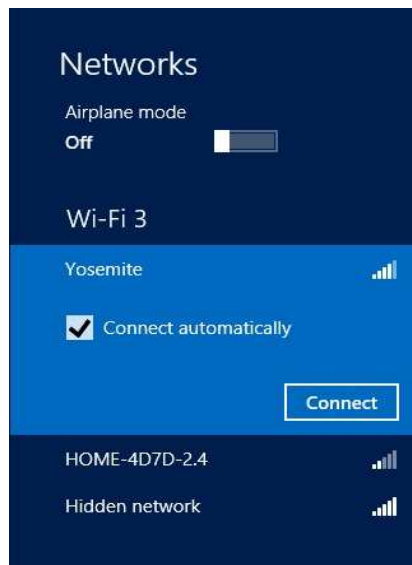
For Windows 8:

1) You move the mouse to the bottom or top right corner of the screen and select the cog icon labeled Settings. Select the wireless

icon  and select your wireless network from the list.



2) Click the “Connect” button to connect to your wireless network.



3) If your wireless network has configured with wireless security, enter the network password. The following is an example for password protected network.



4) You can select to turn on/off sharing before your computer is connected to your wireless network



5) Your computer is connected to your wireless network if you see "Connected" next to your wireless network.



For Windows 7:

1) Click on the wireless icon  in the taskbar in the lower right hand corner of your screen to display the available wireless networks.



2) Select your wireless network, click "Connect" button, and enter the network password to connect to your wireless network.



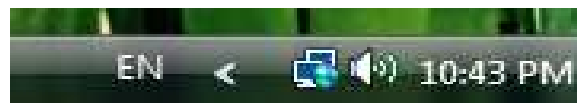


4) Your computer is connected to your wireless network if you see “Connected” next to your wireless network.

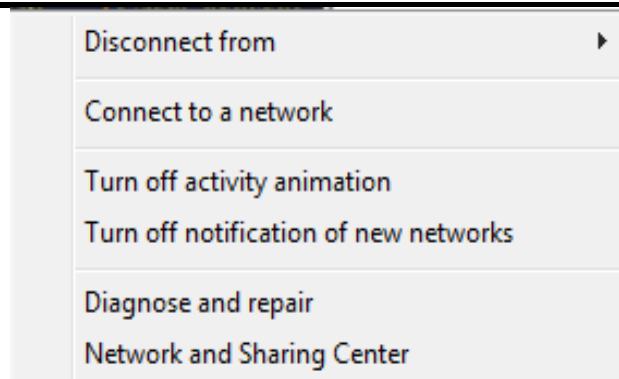


For Windows Vista:

Windows Vista shows a double computer icon in the Windows system tray, which is located in the bottom-right corner of your computer screen.



Right click the icon and then select “Connect to a network” to launch the Connect to a network window.



Select your wireless network, click “Connect” and enter the network password to connect to your wireless network.

For Windows XP:

Windows XP shows a computer icon in the Windows system tray, which locates in the bottom-right corner of your computer screen.



Right click the icon and then select “View Available Wireless Networks” to launch the Wireless Network Connection window which displays all the available wireless networks.



Select your wireless network, click “Connect” and enter the network password to connect to your wireless network.

Tips: If you want to connect to a free/paid WiFi Hotspot in a public area, simply select it from the available wireless networks and then click “Connect”. Your default internet browser will be launched automatically—you will be connected to the Internet after you enter the necessary information to access to the WiFi Hotspot.

5. How to use the Wireless Utility

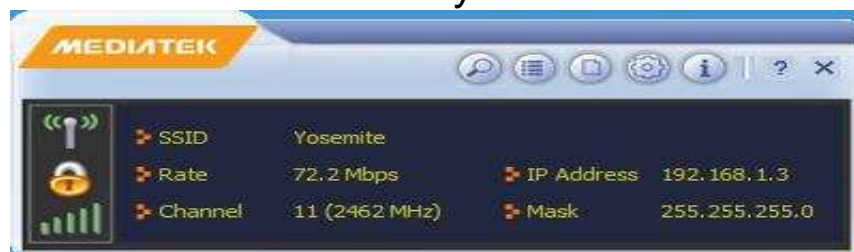
The Wireless Utility software can operate in any of the three modes: Client, AP and Client+AP. The last mode is only available in Windows 7 or higher.

If you select “Install driver and Wireless Utility” during the software installation process, the system will show a wireless icon like the signal bars in the Windows system tray, which is located in the bottom-right corner of your computer screen.

The wireless icon will change colors according to the signal strength after you plug the Panda adapter into your computer.

✧ **Client Mode:** Your computer can connect to your wireless router or AP via the Panda adapter.

1) Right click the wireless icon and then select “Launch Config Utility” to launch the Wireless Utility

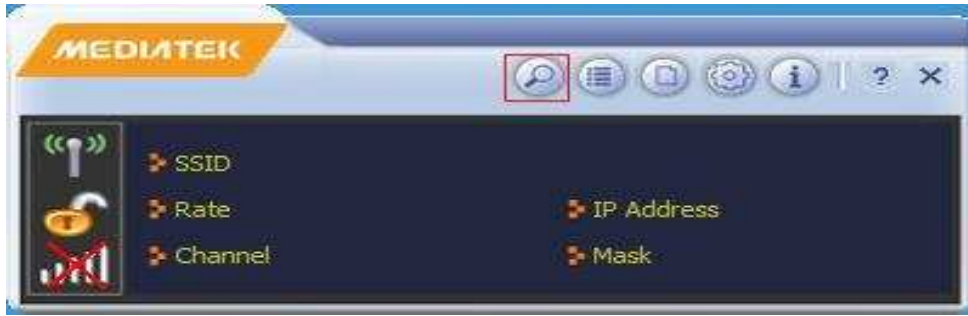


The Wireless Utility starts in compact mode as shown above, which includes “Available Networks”, “Link Information”, “Profile Settings”, “Advanced”, “About” and “Help” buttons at the upper right hand corner.

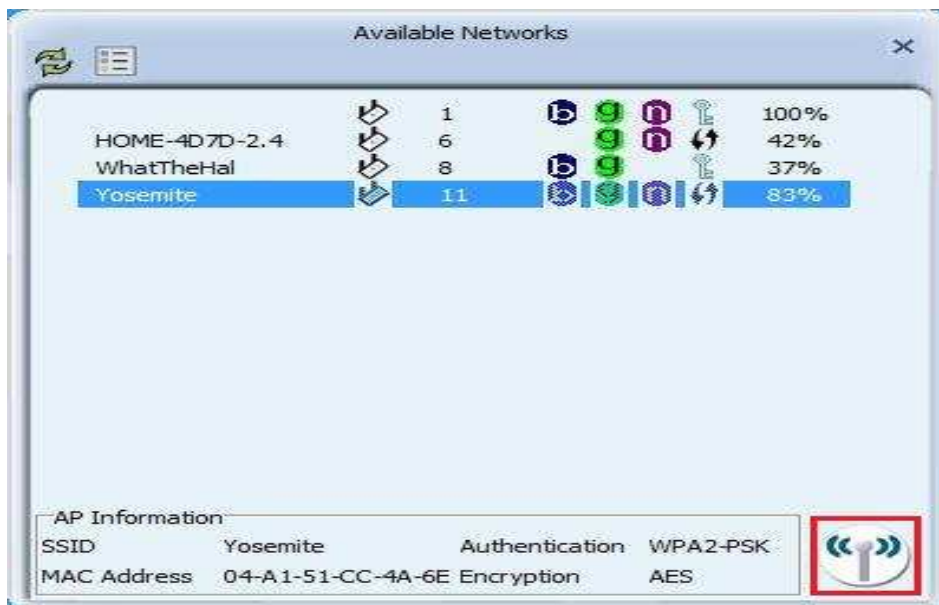
2) Below are the steps to connect to a wireless network using the Wireless Utility.

a. The Wireless Utility will connect to an open wireless network automatically by default. Go to (b) if you want to connect to your wireless network.

b. Click the “Available Networks” button to connect to your wireless network.



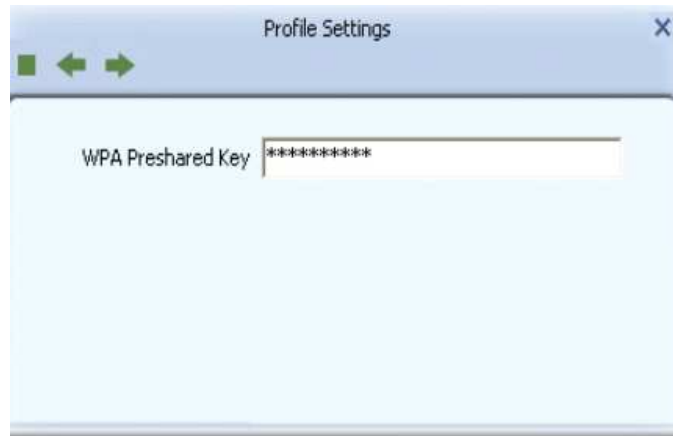
c. Select your wireless network and then click the “connect” icon



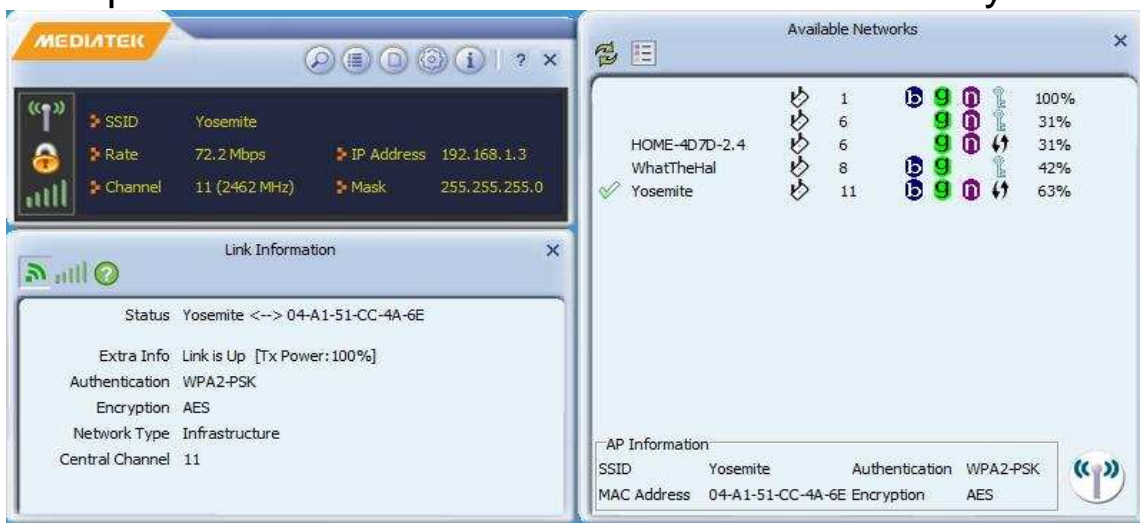
d. The Wireless Utility automatically detects the security settings of the network to which you are connecting in the Profile Settings window. The Profile Settings window shows that WPA2-PSK and AES are detected as shown below, Click the right arrow to go to next screen.



f. You enter the network password in the 'WPA Pre shared Key' field for your wireless network. Click the right arrow to save your settings and connect to the network.

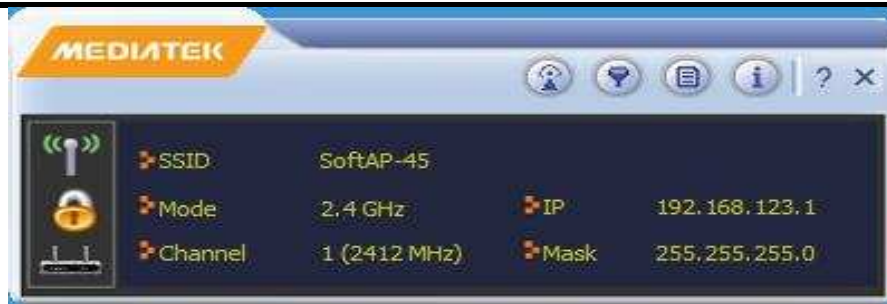


g. You will see a check mark next to your wireless network if your computer is connected to the network successfully.



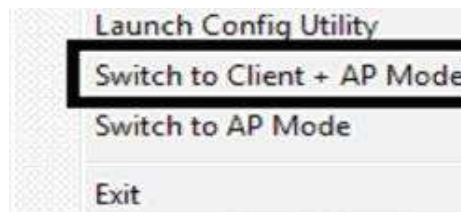
✧ **AP Mode:** You can set up the Panda adapter as an AP, which allows other users to connect to Internet through your computer. Before using this mode, your computer needs to have an existing Internet connection via Ethernet connection or 3G wireless connection.

Right click the wireless icon and select "Switch to AP Mode" to launch the Wireless Utility as shown below:



The Wireless Utility includes “AP Setup”, “Access Control List”, “Connected Devices”, “About” and “Help” buttons in the upper right hand corner. Click the “AP Setup” button to create a new wireless network.

✧ **Client + AP Mode:** You can set up your computer as a WiFi repeater via the Panda adapter in this mode. ***It is only available in Windows 7 or higher.***



Right click on the wireless icon and select “Switch to Client + AP Mode” to launch the Wireless Utility.



The Wireless Utility includes “AP Setup”, “Available Networks”, “Link Info”, “Profile Settings”, “Advanced”, “About” and “Help” buttons in the upper right hand corner.

In this mode, your computer is connected to a wireless network which is connected to the internet and broadcasts wireless signals to create another wireless network simultaneously. All your wireless devices can share the wireless internet connection to get on the internet via the Panda adapter.

6. Tips for Wi-Fi users

With a Wi-Fi connection, you can roam about 150 m around the access point (depending on varying environment). So find a spot where you can work without any interruption, then see how much work you can do, such as:

- Easily and quickly receive and transmit files within your local network (you should have no problem to transfer big files).
- Access your email, stream video, surf the web with the same speed as when connected with cable networks.
- Synchronize data between devices.
- Take advantage of wireless printing — send files directly from your laptop PC to a wireless printer over Wi-Fi connection.

7. WiFi Power Consumption

Wi-Fi offers greater speed and range than Bluetooth, but it drains your portable device batteries a lot faster than Bluetooth does. In fact, if you use a Wi-Fi connection regularly on your laptop PC, you'll undoubtedly 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 don't actually need it.

8. Wireless Network Security

Because wireless networks rely on radio signals to transmit data, they are not as secure as wire 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 unauthorized users out of WiFi Hotspots. It may be found that some paid WiFi Hotspots administered by service providers offer some level of security;

however, when using a WiFi Hotspot, it's always a good idea to be proactive and to employ security measures of your own.

9. Terminology

Wi-Fi: Short for “wireless fidelity,” a generic label that refers to wireless networks or networking.

WiFi Hotspot: A specific geographic location in which an access point provides public wireless broadband network services to mobile visitors through a WLAN through the use of a router connected to a link to an internet service provider.

WiFi Repeater: A WiFi repeater takes an existing signal from a wireless router or wireless access point and rebroadcasts it to create a second network.

Throughput: The amount of data transmitted in a set amount of time.

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

Tx Power: The transmit power measured at the terminal without antenna be considered. Should the antenna gain be considered, the EIRP value is mentioned.

Dual Band: Normally means 802.11b/g/n works in 2.4GHz frequency band or 802.11a/n works in 5GHz frequency band.

10. Specifications (Typical):

Protocol and Standards	IEEE 802.11b/g or 802.11n
Interface	USB1.1, USB2.0
Frequency Band	2.412~2.484GHz & 4.915~5.825 GHz(Depends on different countries' regulation)
Data Rate	<p>Note: The actual data rate is affected by a lot of factors in your environment. Please send an email to support@pandaiwireless.com if you have any question.</p> <p>For 802.11n – 150Mbps: Peak rate: 150Mbps For 802.11n – 300Mbps: Peak rate: 300Mbps</p>
Transmit Power	802.11n: 14dBm.
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 environments).

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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	It supports Windows, Mac OS X and Ubuntu/Mint/Fedora Linux. (Please send an email to support@pandawireless.com for more detail).