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Basic User's Manual for RadioLabs USB Wifi Antennas/Adapters -Windows & MAC-



Thank you for purchasing a RadioLabs USB wireless networking product. This document will instruct you on how to use your RadioLabs device in conjunction with the supplied software on both <u>Windows-based</u> <u>and Macintosh machines</u>. If you have <u>not</u> installed the software and/or drivers, please refer to the Windows or Macintosh Installation Guide included in this directory before continuing.

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These instructions are for:

CaptiFi – High Power USB Wifi Antenna WaveRv - Wireless Rv Solution (purchased after June 10th 2009) Wave Magnum - High Power USB Wifi (500mw & 1000mw versions) O2Boost - Directional USB Wifi Antenna The Seed – Plug and Go USB Wifi System WaveRv Marine - Wireless Marine System (purchased after May 28th 2009) O2Connect - High Power Directional USB Panel (purchased after May 28th 2009)

This guide and the included software are not compatible with the WaveRV II Long Range USB Adapter.

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Windows Operation Instructions

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The Windows software included in this CD or .zip archive is compatible with the following versions of Windows:

- Windows 98 SE
- Windows Me
- Windows 2000
- Windows XP
- Windows Vista (32 & 64-bit*)

The screenshots included in this guide are from the Windows XP version of Windows.

Please note that things may appear slightly different on your system depending on your version of Windows. However, the use of the utility and antenna will be similar regardless of your Windows version.

*The RadioLabs USB Utility is not compatible with Windows Vista 64-bit. Please refer to the 64-Bit Installation instructions on pg. 10 of the <u>Windows Installation Guide</u> for instructions on using your RadioLabs Wifi Antenna/Adapter. Once you have the software installed and your RadioLabs USB Wifi Adapter/Antenna connected to your computer's USB port, open the *RadioLabs Wireless USB Utility* from the desktop icon (designated as a tilted red "a" icon), system tray or Programs Folder in the Start Menu.

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You must have your RadioLabs USB Wifi Antenna/Adapter connected to your PC's USB port to open the utility. The utility will not open if it does not detect an antenna/adapter.

| RadioLabs USB Wireless | s Configuration Utility | |
|------------------------------|--|---|
| Refresh(R) Set Wizard(S) Mod | de(M) View(V) About(A) General Profile Available Network Advanced Status Statistics Wi-Fi Protect Setup Status: Checking Status Speed: N/A Type: Encryption: N/A SSID: Signal Strength: Link Quality: Network Address: 00:E0:4C:04:0D:FC IP Address: 0.0.0.0 Gateway: ReNew IP | |
| Show Tray Icon | Disable Adapter Cos | e |

This is the screen that will appear when the utility has been opened.

To begin, select the "Available Network" tab

| MyComputer RadioLabs Wireless 8 | General Profil Available Network Advanced Status Statistics Wi-Fi Protect Setup | | | | | |
|---------------------------------|---|-----------------------------|-------------|------------------------|--------|--|
| | Available Network(s) | Channel | Encountion | Notwork Authoptication | Signal | |
| | PEnGenius | Channel 1 | None | Unknown | 02% | |
| | 1 ⁹ linksvs | 6 | None | Unknown | 82% | |
| | RadioLabs5 | 9 | TKIP | WPA Pre-Shared Key | 86% | |
| | 1 ³⁾ 3610 Pryor | 11 | TKIP | WPA Pre-Shared Key | 84% | |
| | 1 ³⁹ RadioMesh | 11 | None | Unknown | 86% | |
| | ٤) | 100.1 | | | > | |
| <u> </u> | Note Double click on i | Refresh tem to join/crea | te profile. | Add to Profile | | |
| د | | | | | | |
| Show Tray Icon |) |] Disable Adapte | er | | Close | |

Select the network or wireless hotspot you would like to connect to by double clicking on it.

If the network lists an encryption type or Network authentication (I.e. TKIP, AES, WPA, WPA2) you will need a network key or password to gain access. If "None" is listed, you can connect without providing a password.

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If you have connected to an unsecured or encrypted network, the below dialog box will appear, click *"OK"* to continue

| (i) | You are connecting to the unsecured network " Genius " |
|-----|--|
| V | information sent over this network is not encrypted and might be visible to other people |
| | |

The first time your RadioLabs USB Wifi Antenna/Adapter connects to any given network, the below "Wireless Network Properties" window will appear and will allow you to change the saved profile name, enter a network key, etc.

If you need to enter a password to access the network or hotspot, you will enter it in the "Network Key" field and also the "Confirm network key" field. Select "OK" when you are finished. This screen will only appear the first time you connect to a network. If you wish to change any of the properties at a later date, select the "Profile" tab.

| Profile Name: | Genius | | |
|---|---|--------------------------------|---|
| etwork Name(SSID): | Genius | | |
| This is a computer-t access points are n | to-computer(ad hoc) network; wireless ot used. | | |
| Channel: | 1 (2412MHz) 👻 | 802.1x configure EAP TYPE : | |
| Wireless network sec | urity | GTC | |
| This network requires | a key for the following: | Tunnel : | |
| Netw | ork Authentication: Open System 💉 | | ~ |
| | Data encryption: Disabled | Username : | |
| | SPHRASE | | |
| | | Identity : | |
| Key index (advanced) Network key: | 1 1 💌 | Password : | |
| Confirm network key: | | Certificate : | |
| | | | |

After you have connected and saved your profile settings, select the "General" tab. Here you can view your Signal Strength, Link Quality, IP address and Network information.

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(Note: Your RadioLabs USB Wifi Antenna/Adapter <u>may</u> take up to 60 seconds to associate with a network.)

At this point, you should be connected to the selected network and be able to access the network's resources (i.e. internet, printers, other network devices). If the network is a public wifi network, you should be able to access the internet*. If your computer is not online, make sure you have a valid IP address[†], gateway and that your status shows "Associated". You can also try connecting to a different wireless network or plugging the device into a different USB port.

*Some open wireless networks are not connected to the internet, so even if you do connect successfully, you may not be able to get online. These networks are generally in-office networks designed for PC connectivity, not internet access.

*valid IP addresses usually follow the same string as the gateway address, if the network is not responding or if there are no addresses available (i.e. the network is busy), your PC will assign itself a 169.254.xxx.xxx address with no gateway, which is not valid and will not allow your PC access to the network or internet.

Macintosh Operation Instructions

The MAC software included in this CD or .zip archive is compatible with the following versions of the MAC OS X:

- OS 10.3 "Panther" (all revisions)
- OS 10.4 "Tiger" (all revisions)
- OS 10.5 "Leopard" (all revisions)
- OS 10.6 "Snows Leopard" (all revisions)

The screenshots included in this guide are from MAC OS 10.4.

Please note that things may appear slightly different on your system depending on your OS version. However, the use of the utility and antenna will be similar regardless of your OS version.

Once you have installed the software and enabled the connection in your System Preferences, plug in your RadioLabs USB Wifi Antenna/Adapter and open the Realtek WLAN Client Utility. This will either be on your dock or in the applications folder in Finder.

You must have your RadioLabs USB Wifi Antenna/Adapter connected to your MAC's USB port to open the utility. The utility will not open if it does not detect an antenna/adapter.

When you open the utility, it may automatically connect to a nearby wireless network. If not, you will need to use the utility to connect to an available signal.

This is the screen that will appear when you open the Realtek WLAN Client Utility. This unit has automatically connected to an available signal. Your utility may not show signal strength and may have the connection listed as "Disconnected". If this is the case, continue below.

| Link Status | Profiles | Available Network | Advance Setting | Information |
|------------------|------------|-------------------|-----------------|---------------|
| MAC Address : | 00c0ca1b | 44fc | | |
| SSID : | 3610 Pryc | or | | |
| BSSID : | 00027273 | 3d7a2 | | |
| Security : | WPA-PSK | ткір | | |
| Connection : | Connecte | d | | |
| Network Type : | Infrastruc | ture | | |
| Channel : | 11 | | | |
| Signal Strength: | | | e | Turn Radio Of |

Select "Available Network". This will show you networks or wireless hotspots within range of your RadioLabs USB Wifi Antenna/Adapter.

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If the network lists an encryption type or Network authentication (I.e. TKIP, AES, WPA, WPA2) you will need a network key or password to gain access. If "None" is listed, you can connect without providing a password.

| Li | nk Status Profi | les Availak | ole Network | Advance Setting | Information |
|------|-----------------|-------------|----------------|-----------------|-------------|
| | | | | | |
| Asso | SSID | Channel | Network Type | Encryption | BSSID |
| | RadioLabs5 | 5 | Infrastructure | WPA-PSK TKIP | 001601597 |
| | 3610 Pryor | 11 | Infrastructure | WPA-PSK TKIP | 00027273d |
| | 2WIRE954 | 10 | Infrastructure | WEP | 0019e454b |
| | | | | | |
| | | | | | |

To connect to a network, select the network and click "Connect"

The first time your RadioLabs USB Wifi Antenna/Adapter connects to any given wireless network, you will need to create a profile that saves the settings (SSID, Network Name, Network Key). If the network requires a password, you will enter it in the "Network Key" field and confirm below. Click "OK" when finished to connect.

| Wireless Network Security Properties |
|--|
| Profile Name : |
| SSID : |
| This is a computer-to-computer (AdHoc) network; woreless access points are not used. |
| AdHoc channel : 1: 2412 MHz + |
| Wireless Network Security Properties |
| This network requires a key for the following : |
| Network Authentication : WPA_PSK |
| Data Encryption : TKIP |
| ASCI |
| |
| Network key : |
| Confirm network key : |
| Key index (advanced) : 1 |
| Please enter Key strings before clicking on OK to connect ==> OK Cancel |

At this point, you should be connected to the selected network and be able to access the network's resources (i.e. internet, printers, other network devices). If the network is a public wifi network, you should be able to access the internet*. If your computer is not online, make sure you have a valid IP address[†], gateway and that your status shows "Associated". You can also try connecting to a different wireless network or plugging the device into a different USB port.

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*Some open wireless networks are not connected to the internet, so even if you do connect successfully, you may not be able to get online. These networks are generally in-office networks designed for PC connectivity, not internet access.

+you can view your adapter network information under System Preferences>Network>Ethernet Adapter (enX) – where X is a number assigned to the device by your Mac. Valid IP addresses usually follow the same string as the gateway address. If the network is not responding or if there are no addresses available (i.e. the network is busy), your MAC will assign itself a 169.254.xxx.xxx address with no gateway/router address, which is not valid and will not allow your MAC access to the network or internet.