

LogiLink®

WL0237

WLAN 802.11ac

Nano USB Adapter

WL0238

WLAN 802.11ac

**Mini USB Adapter
with External Antenna**



User Manual | EN



According to the European WEEE directive, electrical and electronic equipment must not be disposed with consumers waste. Its components must be recycled or disposed apart from each other. Otherwise contaminative and hazardous substances can pollute our environment. You as a consumer are committed by law to dispose electrical and electronic devices to the producer, the dealer, or public collecting points at the end of the devices lifetime for free. Particulars are regulated in national right. The symbol on the product, in the user's manual, or at the packaging alludes to these terms. With this kind of waste separation, application, and waste disposal of used devices you achieve an important share to environmental protection.

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Chapter 1: Introduction

Thank you for purchasing WL0237/WL0238! This adapter has ultra-nano size design; complies with IEEE802.11 ac/a/b/g/n standards, and data transfer rate up to 150/433Mbps. Compatible with Windows/Linux/Mac OS/Android.

1.1 Specification

Chipset Solution	Realtek 8811AU
Standard	IEEE802.11 ac/a/b/g/n
Interface Type	USB 2.0 /1.1
Frequency Range:	2,400-2,483.5 MHz/5,150-5,825 MHz (varies according to different regions)
Max. Transmitting Power	100 mW
Data Rate	150 Mbps (2.4 GHz) 433 Mbps (5.8 GHz)
Power Consumption	0.75 W
Transmission Distance	10-15 m
Security	64/128-bit WEP, WPA, WPA2, WPA-PSK, TKIP, AES
Supported OS	Windows XP/Vista/7/8/8.1/10 Linux Kernel 2.6.18~2.6.38 and 3.8.2 MAC OS X 10.4/10.5/10.6/10.7/10.8/10.10 Android 1.6~2.3/4.0~4.2
Dimension	22x16.4x8.5 mm (WL0237) / 79x113x12 mm (WL0238)
Weight	2.4 g (WL0237) / 34 g (WL0238)
Temperature	Operating Temperature: 0~40°C Storage Temperature: -20~60°C
Humidity	Operating Humidity: 10~85% non-condensing Storage Humidity: 5~95% non-condensing

1.2 Package Contents

- 1 x WLAN 802.11ac USB Adapter
- 1 x Quick Installation Guide

1.3 LED Indicator (WL0238 only)

The LED is blinking when data is transferring.

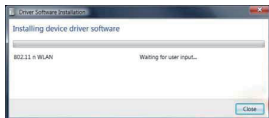
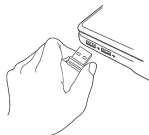
Chapter 2: Installation

This chapter is to assist you how to use the CD-ROM provided which comprises the Driver and the Client Utility Interface.

2.1 Driver Installation

Please follow the following instructions to install your new wireless USB Adapter:

- ❗ Please download the driver online at:
<http://downloads.2direct.de/treiber/WL0237.zip>
<http://downloads.2direct.de/treiber/WL0238.zip>
- ➊ Insert the USB adapter into an empty USB 2.0 port of your computer when computer is switched on. Never use force to insert the card, if you feel it's stuck, flip the adapter over and try again.
- ➋ The following message will appear on your computer, click **Cancel / Close**.



Windows Vista and Windows 7



Windows XP

- ➌ Click **Driver Installation**.



(WL0237)

- ➍ Please follow the installation instructions. Once the installation has completed the computer will be asked to reboot. Please click **Finish** and reboot the computer to finish the installation of driver files.

- 5 A new icon will appear near the clock of system tray:

Left-click the icon will launch wireless network configuration utility, and you can right-click the icon to show the quick menu of configuration utility. This icon also uses different color to show the status of wireless connection:



Wireless connection is established, good signal reception.



Wireless connection is established, weak signal reception.



Connection is not established yet.



Wireless adapter is not detected.

For detailed instructions of wireless network configuration utility, please see next chapter.

2.2 Connect to Wireless Access Point

To use wireless network, you have to connect to a wireless access point first. You can either use Client utility (comes with network adapter driver), or Windows Zero Config utility (comes with Windows operating system).

2.2.1 Using Client Utility

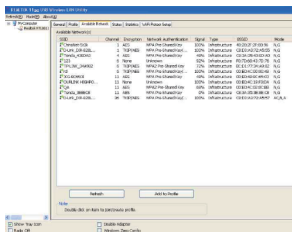
Please follow the following instructions to use Client configuration utility to connect to wireless access point.

- 1 Left-click the Client configuration utility icon located at lower-right corner of computer desktop, and configuration menu will appear:

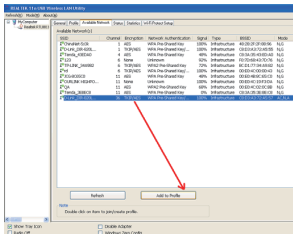


Here!

- 2 Wireless utility will appear. Click **Available Network** menu to search for wireless access points nearby.



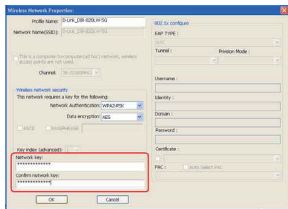
- 3 Please wait for a while, and all wireless access points which can be reached by this wireless network card will be displayed here.



If the wireless access point you wish to connect does not appear here, you can click **Refresh** button to scan for wireless access points again; if the wireless access point you're looking for still not appear, try to move the computer closer.

When the access point you're looking for is on the list, left-click it and then double click it or click **Add to Profile**.

- 4 If a password (a.k.a. **Network Key**) is required to access the wireless access point, please input it in **Network key** (and input it again in **Confirm network key** for confirmation). Click **OK** when password is properly input.



- ! Network security type (**Network Authentication** and **Data encryption**) will be selected automatically based on wireless access point's security setting. It's not required to change these settings by yourself.

All options in this page will be filled automatically according to the access point you wish to add to profile. However, you can still modify any of them to meet your requirement.

Profile Name	You can give a name to this profile, so you can remember its purpose easily. It can be any phrase to help you remember.
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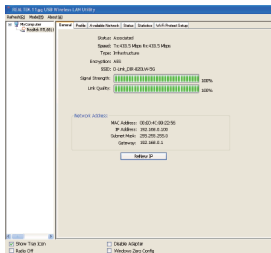
Network Name (SSID)	The SSID (Service Set Identifier, i.e. access point's name). This field will be filled as the access point you selected when SSID is not hidden and grayed out. If SSID is hidden, you have to input correct SSID yourself.
This is a computer-to-computer (ad hoc) network	Check this box if you wish to connect to another computer / network device by ad hoc method. When not accessing to wireless access point, you have to check this box.
Channel	Select wireless channel for ad hoc connection. This option only appears when you're using ad hoc connection.
Network Authentication	Select the network authentication type from drop-down menu. This setting must be identical with the setting of wireless access point you set to connect.
Data Encryption	Select the data encryption type from drop-down menu. This setting must be identical with the setting of wireless access point you set to connect.
ASCII / PASSPHRASE	When the encryption type is WEP , it's required to input a set of passphrase to connect to wireless access point. Check ASCII or PASSPHRASE depending on the security setting of the access point, and input it in the box; if you select PASSPHRASE you also need to select the length of the key. The passphrase must be identical with the setting of wireless access point you set to connect.
Key Index	Select WEP key index. For most of the access points you can select 1 , but please refer to the setting of the access point.
Network key / Confirm network key	When the encryption type is WPA or WPA2-PSK , it's required to input a set of passphrase to connect to wireless access point. Please input the same passphrase in two boxes for confirmation.

EAP TYPE / Tunnel / Provision Mode	When authentication type is any of 802.1X, you have to select EAP type, tunnel, and provision mode from dropdown menu. This setting must be identical with your 802.1x authentication server.
Username / Identity / Domain / Password	Please input 802.1x related authentication information here.
Certificate	If certification is required to authenticate with 802.1x authentication server, please select a local certificate from dropdown list.
PAC	Check this box and PAC (Privilege Access Certificate) will be automatically selected.

Please click **OK** when ready.

- Network adapter will attempt to connect to access point now, this may require few seconds to minutes, please be patient. When the **Status** become **Associated**, your computer is connected to access point you selected. Click **Close** to close configuration menu.

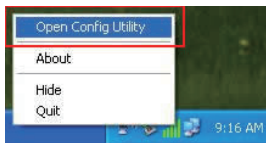
- If you connected to an access point but the connection has been dropped soon, please check security settings and re-check password spelling.



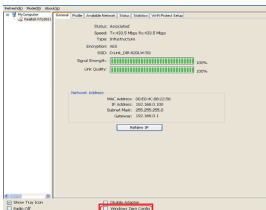
2.2.2 Using Windows Zero Configuration

Windows XP and Vista has a built-in wireless network configuration utility, called as 'Windows Zero Configuration' (WZC). You can also use WZC to configure your wireless network parameter:

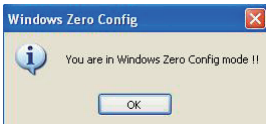
- Right-click Client configuration utility icon, and click **Open Config Utility**.



- 2 Check **Windows Zero Config** box.

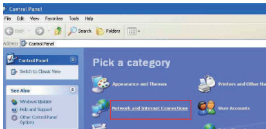


- 3 A message indicating that you've been switched to Windows Zero.

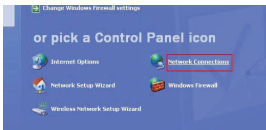


- ! To return to use Client utility, uncheck **Windows Zero Config** box.

- 4 Click **Start** button (should be located at the bottom-left corner of windows desktop), click **Control Panel**, then click **Network and Internet Connections** in Control Panel.



- 5 Double click **Network Connections**.



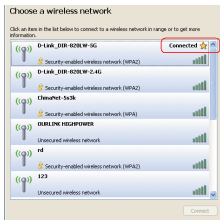
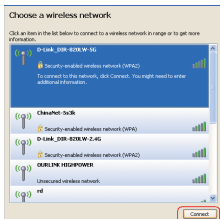
- 6 Right-click **Wireless Network Connection** (it may have a number as suffix if you have more than one wireless network card, please make sure you right-click the Wireless LAN 802.11ac USB Network Adapter), then select **View Available Wireless Networks**.



- 7 All wireless access points in proximity will be displayed here. If the access point you want to use is not displayed here, please try to move your computer closer to the access point, or you can click **Refresh network list** to rescan access points. Click the access point you want to use if it's shown, then click **Connect**.

- 8 If the access point is protected by encryption, you have to input its security key or passphrase here. It must match the encryption setting on the access point. If the access point you selected does not use encryption, you'll not be prompted for security key or passphrase.

- 9 If you can see 'Connected' message, the connection between your computer and wireless access point is successfully established.

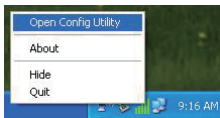


Chapter 3: Client Utility

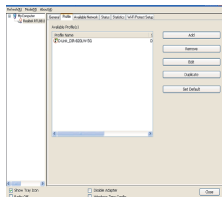
3.1 Connection Profile Management

If you need to connect to different wireless access points at different times, eg. access point of your home, office, cyber cafe, or public wireless service, you can store the connection parameters (encryption, passphrase, security etc.) as a profile for every access point, so you don't have to input these parameters every time when you want to connect to a specific wireless access point.

- 1 To manage profiles, right-click the Client configuration utility icon located at lower-right corner of computer desktop, then click **Open Config Utility**.



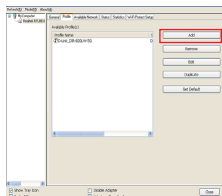
- Click the 'Profile' menu.



3.1.1 Add a new profile

By this function you can setup the connection parameters for a specific wireless access point in advance, without contacting it first.

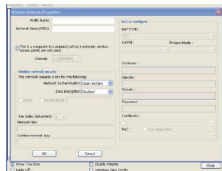
- If you want to create a new profile, click **Profile** menu, then click **Add** button.



- You'll be prompted to input connection parameters for the wireless access point you wish to connect:

Required parameters are listed in the Table in section 2.2.1.

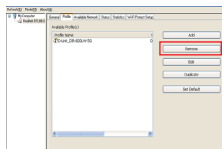
- When all required parameters are set, click **OK** to create and save a new profile.



3.1.2 Remove an existing profile

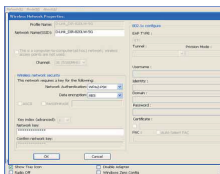
When you no longer need an existing profile, you can remove it.

- If you want to remove a profile, click **Profile** menu, then select an existing profile which you wish to remove, and then click **Remove** button.



3.1.3 Edit an existing profile

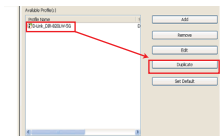
If you have added a profile before, and you wish to change the content of the profile, you can use this function. Please select a profile from the list first, then click **Edit** button. You'll be provided with the contents of selected profile, and you can edit them. Click **OK** to save changes, or click 'Cancel' to discard changes.



3.1.4 Make a copy of existing profile

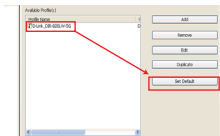
If you need to make a copy of a specific profile, you can use this function. This function is very convenient when you need to build a new profile which parameters are similar to any existing profile.

- 1 To do this, select an existing profile, then click **Duplicate** button.
- 2 You'll be prompted to input a profile name, please use an identical name that does not exist in profile list.



3.1.5 Set as default profile

If you wish to use a specific profile as default connection, you can select a profile in the list, and click **Set Default**. Selected profile will become default selection and Client configuration utility will attempt to connect to selected access point.



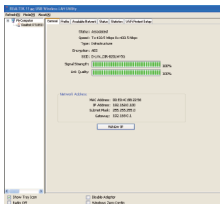
3.2 View Network Statistics, General Information, and Status

The configuration utility provides information about network statistics and link status. If you want to know how your wireless network adapter works, you can use these functions to get detailed information about the wireless connection you're using.

3.2.1 General Information

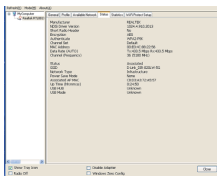
If you want to know the general information of the access point you're connecting to, click **General** menu:

All general information like signal strength and link quality will be displayed here. These information are very useful when you encounter some problem on connecting to access point. If you wish to get a new IP address from DHCP server, you can click **ReNew IP** button.



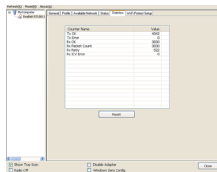
3.2.2 Status

If you want to know the status of your wireless network adapter, click **Status** menu:



3.2.3 View Network Statistics

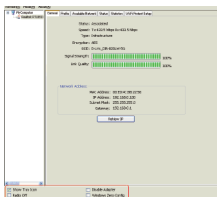
To view the statistical data of wireless network card, click **Statistics** menu, and the statistics of wireless connection will be displayed:




All connection-related statistics is displayed here. You can click **Reset** button, to reset the statistics of all items back to 0.

3.3 Miscellaneous Settings

There are few functions provided by Client configuration utility, you can access these functions from the bottom of configuration menu:



The descriptions of these function are listed as follow:

Show Tray Icon	<p>Check this box to show an icon on system tray.</p>  <p>Uncheck this box to hide it.</p>
Radio Off	Switch wireless radio off. Wireless network functionalities are disabled.
Disable Adapter	Disable wireless network adapter. All functionalities of configuration menu will disappear. To resume, uncheck Disable Adapter .
Windows Zero Config	Use Windows Zero Configuration to manage wireless connections. See section 2.2.2.

3.4 Establish secure connection with AP by WPS

Wi-Fi Protected Setup (WPS) is the latest wireless network technology which makes wireless network setup become very simple. If you have WPS-enabled wireless access point, and you want to establish a secure connection to it, you don't have to configure the wireless access point and setup data encryption by yourself. All you have to do is to go to the WPS setup page of this wireless adapter, click a button, and then press a specific button or enter a set of 8-digit code on the wireless access point you wish to establish a secure connection - just three simple steps!

For older wireless access points, it's possible to perform a firmware upgrade to become a WPS-enabled access point. Since they may not have a hardware button to press for WPS setup, you can use an alternative WPS setup method - input the pin code. Every WPS-compatible wireless network card support pin code configuration method; you can just input the code to wireless access point, and the wireless access point and wireless network card will do the rest for you.

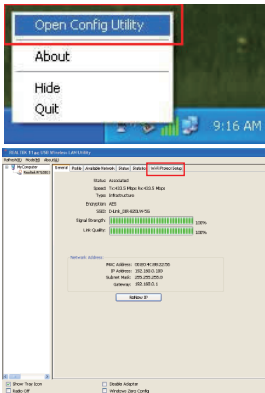
This wireless network card is compatible with WPS. To use this function, the wireless access point you wish to connect to must support WPS function too. Now, please follow the following instructions to establish secure connection between WPS-enabled wireless access point and your wireless adapter.

This wireless network card supports 2 kinds of WPS: PIN code and Push-Button.

Please follow the following instructions to setup WPS:

- 1 Right-click Client configuration utility icon, and click **Open Config Utility**.

- 2 Click **Wi-Fi Protect Setup** menu.

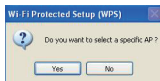


- 3 You can use PIN code or Push-Button configuration, and WPS-compatible wireless access point must use the same type of WPS. For instructions on setup each type of WPS, see next 2 chapters for detailed instructions.

3.4.1 PIN Code

To use PIN Code, please click **Pin Input Config (PIN)** button:

You'll be prompted to select an access point you wish to connect. If you know its SSID, click **Yes**, otherwise click **No**.

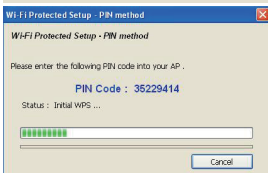
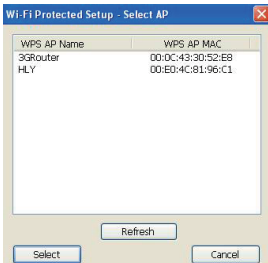
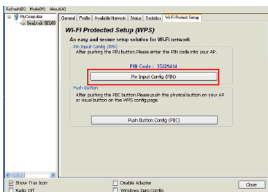
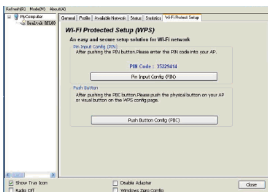


If you select **Yes**, a list of all WPS-compatible AP nearby will be displayed; you can click **Refresh** to rescan, then select an AP and click **Select** button.

If you select **No**, wireless network adapter will prompt you to enter 8-digit PIN code into your AP, without selecting an AP in advance.

After you select **Yes** or **No** in previous step, network adapter will attempt to connect to WPS-compatible AP, and an 8-digit number will appear. Please input this number to AP's configuration menu within 2 minutes, and network adapter will establish secure connection with AP automatically.

To stop this procedure before connection is established, click **Cancel**.

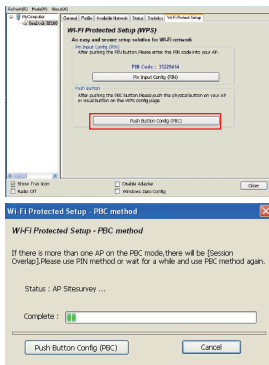


3.4.2 Push Button

To use Push-Button WPS configuration, please click **Push Button Config (PBC)** button. This is the easiest way to establish secure connection by WPS, but if there're more than one WPS-compatible AP using Push-Button config, please use PIN Code instead.

After you click **Push Button Config (PBC)**, a message box will appear:

Please activate Push-Button function on wireless access point now, and wireless network card will establish secure connection with access point within one minute.



Chapter 4: Soft-AP Function

Excepting become a wireless client of other wireless access points, this wireless adapter can act as a wireless service provider also! You can switch this wireless adapter's operating mode to **AP** mode to simulate the function of a real wireless access point by software, and all other computers and wireless devices can connect to your computer wirelessly, even share the internet connection you have!

Please follow the instructions in following chapters to use the AP function of your wireless adapter.

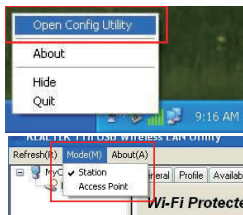
4.1 Switch to AP Mode and Station Mode

The operating mode of the wireless card is **Station Mode** (becoming a client of other wireless access points) by default.

Please follow the following instructions to switch to AP mode:

❶ Right-click Client configuration utility icon, and click **Open Config Utility**.

❷ Select **Mode**, and then select **Access Point**.



It requires few seconds to switch to AP mode, please be patient.

After mode switch is complete, you'll see general information of software AP, which shows AP's SSID and connected wireless clients.

Client mode icon :

Software AP icon:

4.1.1 Configure SSID and Channel

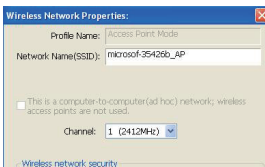
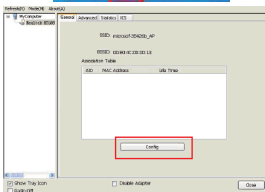
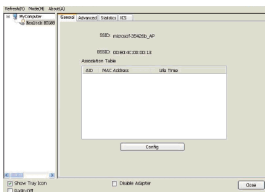
To configure software AP, click **Config** button:

The **Wireless Network Properties** is displayed.

Please note that Ad-Hoc mode is not available when network adapter is in AP mode. The description of major setup items are listed below:

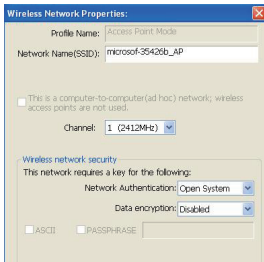
Network Name (SSID)	Please input the SSID (the name used to identify this wireless access point) here. Up to 32 numerical characters can be accepted here, excepting space.
Channel	Please select the wireless channel you wish to use, from 1 to 13.

To save changes, click **OK**; otherwise click **Cancel** to leave this menu and keep settings untouched.



4.1.2 Setup Soft-AP Security

To setup security options for Soft-AP, configure **Wireless Network Security** section as follow:



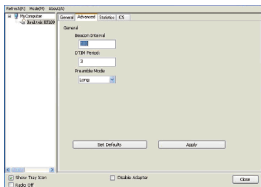
The description of setup items about wireless security are listed below:

Network Authentication	Select network authentication mode from drop down menu.
Data Encryption	Select data encryption method from drop down menu.
ASCII / PASSPHRASE	If the encryption method is WEP, check either ASCII or PASSPHRASE box and input it in the box as WEP passphrase.
Key Index	Select WEP key index (1-4). If you don't know which one you should use, select 1.
Network key / Confirm network key	IF network authentication mode is WPA, please input WPA passphrase in both box.

To save changes, click **OK**; otherwise click **Cancel** to leave this menu and keep settings untouched.

4.2 Advanced Settings

If you want to setup advanced settings of software access point, select **Advanced** menu. If you don't know the meaning and affects of these settings, keep them untouched.



The description of all setup items are listed below:

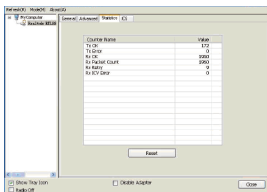
Beacon Interval	Please input wireless beacon time interval here.
DTIM Period	Please input DTIM (Delivery Traffic Indication Message) here.
Preamble Mode	Select wireless frame preamble mode (long or short) from drop down menu.
Set Defaults	Reset all settings back to factory default value.
Apply	Save changes.

If you changed any setting here and cause problem on communicating with wireless clients, click **Set Defaults** to reset all settings back to default setting.

4.3 Wireless Statistics

Select **Statistics** menu and the data statistics about software access point will be displayed.

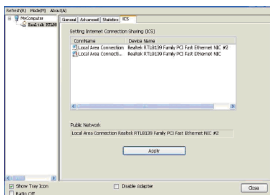
Click **Reset** to reset the value of every item back to 0.



4.4 Internet Connection Sharing (ICS)

In this page, you can assign a network adapter/card on your computer as the path for all wireless clients to get connected to Internet.

If you have only one network adapter/card (except this software access point), you don't have to select network adapter/card here; if you have more than one network adapter/card, select the one you wish to be used as Internet gateway.



Click **Apply** to save changes (**Apply** is grayed out when no changes are made in this page).

CHAPTER 5: Troubleshooting

If you encounter any problem when you're using this wireless network adapter, don't panic! Before you call your dealer of purchase for help, please check this troubleshooting table, the solution of your problem could be very simple, and you can solve the problem by yourself !

Scenario	Solution
<p>I can't find any wireless access point / wireless device in Site Survey function.</p>	<ol style="list-style-type: none"> 1. Click Rescan for few more times and see if you can find any wireless access point or wireless device. 2. Please move closer to any known wireless access point. 3. Ad hoc' function must be enabled for the wireless device you wish to establish a direct wireless link. 4. Please adjust the position of network adapter (you may have to move your computer if you're using a notebook computer) and click Rescan button for few more times. If you can find the wireless access point or wireless device you want to connect by doing this, try to move closer to the place where the wireless access point or wireless device is located.
<p>Nothing happens when I click Open Config Utility</p>	<ol style="list-style-type: none"> 1. Please make sure the wireless network adapter is inserted into your computer's USB port. 2. Reboot the computer and try again. 3. Remove the adapter and insert it into another USB port. 4. Remove the driver and re-install. 5. Contact the dealer of purchase for help.
<p>I can not establish connection with a certain wireless access point</p>	<ol style="list-style-type: none"> 1. Click Add to Profile for few more times. 2. If the SSID of access point you wish to connect is hidden (nothing displayed in SSID field in Site Survey function), you have to input correct SSID of the access point you wish to connect. Please contact the owner of access point to ask for correct SSID. 3. You have to input correct passphrase / security key to connect an access point with encryption. Please contact the owner of access point to ask for correct passphrase / security key. 4. The access point you wish to connect only allows network cards with specific MAC address to establish connection. Please go to Status menu and write the value of MAC Address down, then present this value to the owner of access point so he / she can add the MAC address of your network adapter to his / her access point's list.

Scenario	Solution
The network is slow / having problem when transferring large files	<ol style="list-style-type: none"> 1. Move closer to the place where access point is located. 2. There could be too much people using the same radio channel. Ask the owner of the access point to change the channel number. <p>Please try one or more solutions listed above.</p>



WL0237

WL0238



The software used by this device underlies the GNU-GPL (General Public License) You can find further information at www.2direct.de/gpl.htm



Hereby, the company 2direct GmbH declares that the WLAN 802.11ac Nano USB Adapter type WL0237 and WLAN 802.11ac Mini USB Adapter with External Antenna type WL0238 is in compliance with the essential requirements and other relevant regulations of Directives 2014/53/EU and 2014/30/EU. The complete Declaration of Conformity can be found at <http://www.2direct.de>
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