

## USB 2.0 802.11b/g/n 300Mbps 2T2R Mini Wireless Network Adapter

USB300WN2X2C



\*actual product may vary from photos

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## FCC Compliance 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 StarTech.com could void the user's authority to operate the equipment

## Industry Canada Statement

This Class B digital apparatus complies with Canadian ICES-003. Cet appareil numérique de la classe [B] est conforme à la norme NMB-003 du Canada. This device complies with Industry Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions: (1) This device may not cause interference, and (2) This device must accept any interference, including interference that may cause undesired operation of the device. Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes: (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

### IC Radiation Exposure Statement:

This equipment complies with IC RSS-102 radiation exposure limit set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator and your body.

### Déclaration d'exposition à la radiation:

Cet équipement respecte les limites d'exposition aux rayonnements IC définies pour un environnement non contrôlé. Cet équipement doit être installé et mis en marche à une distance minimale de 20 cm qui sépare l'élément rayonnant de votre corps. L'émetteur ne doit ni être utilisé avec une autre antenne ou un autre émetteur ni se trouver à leur proximité.

FCC ID: 2AAD8-WU331  
IC: 11232A-SB300WN2X2C

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# Introduction

## Packaging Contents

- 1 x USB Wireless N Adapter
- 1 x Driver CD
- 1 x Instruction Manual

## System Requirements

- Available USB port
- Windows® 8 / 8.1 (32/64bit), 7 (32/64), 10 (32/64), Vista(32/64), XP(32/64), Windows Server® 2012, 2008 R2, 2003(32/64 ), Mac OS® 10.6 and up (Tested up to 10.9), Linux kernel 2.6.18 – 2.6.38

## Product Overview



## LED Indicator

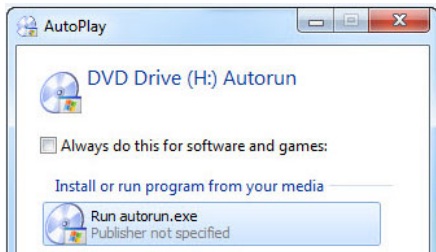
Slow Flash - Waiting for connection

Quick Flash - Link established / Activity

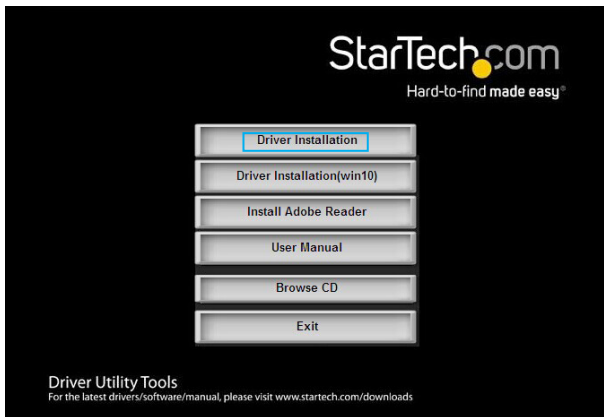
# Installation

## Windows

1. Insert the provided CD into your DVD/CD-ROM drive.
2. Select Autorun.exe from the Autoplay menu. If Autoplay is disabled on your system, browse to your CD/DVD drive and run the application.



3. Select the **Driver Installation** option.



4. Follow the on-screen instructions to complete the installation.  
**NOTE:** You may be prompted to restart once the install completes.
5. Connect the device to an available USB port.

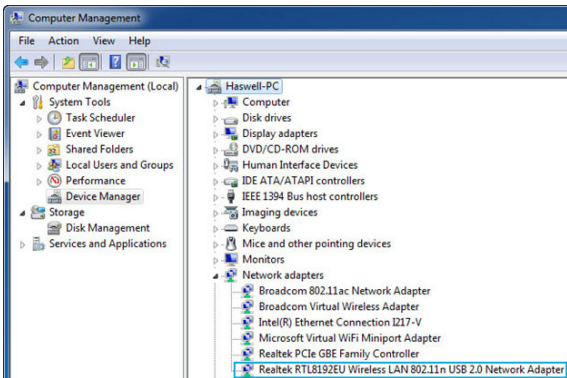
## Mac OS

1. Insert the provided CD into your DVD/CD-ROM drive.
2. Browse to the appropriate Mac OS version folder on the disc and run the **Installer.pkg** application to start the install.
3. Follow the on-screen instructions to complete the installation.  
**NOTE:** You may be prompted to restart once the install completes.
4. Connect the device to an available USB port.

## Verifying Installation

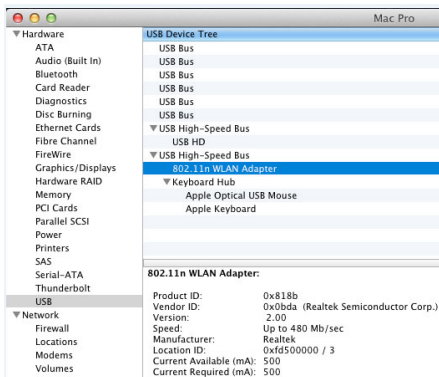
### Windows

1. Open the Device Manager by right-clicking on **Computer**, and then select **Manage**. In the new Computer Management window, select **Device Manager** from the left window panel (For Windows 8, open the **Control Panel** and select **Device Manager**).
2. Expand the “*Network adapters*” section. On a successful install, you should see the following device in the list with no exclamation points or question marks.



# Mac OS

1. Open the System Report by clicking the Apple symbol in the top left corner, selecting **About this Mac**, then select **System Report**.
2. Expand the “Hardware” section and click “USB” in the left column. With the adapter connected, you should see the following device in the list.



## Operation

### Windows

Connecting to a wireless network is done through either the Windows wireless configuration utilities, or through the Realtek utility. You must know the name of the wireless network (SSID), the type of security it is using (if any) and its associated password to connect to a wireless network. Consult the documentation for your wireless access point (AP) or contact your network administrator for details.

Depending on your version of Windows, you can display the list of available networks using one of the following methods:

#### Windows 8

Move the cursor to the upper right corner to open the Charms Bar, select Settings and then select **Wifi**

#### Windows 7

Click the network adapter tray icon

#### Windows Vista

Click **Start**, then **Connect To**

#### Windows XP

Right-click the wireless adapter tray icon and select **View Available Wireless Networks**



# Realtek Utility

## Tray Icon

The tray icon will display one of the following three statuses:

Utility running, but no WLAN adapter detected



WLAN adapter detected, not connected to a wireless network



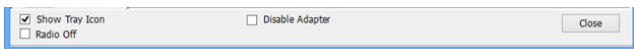
WLAN adapter detected and connected to a network



## Client Mode

Click on the tray icon to open the configuration window. The following sections outline the tabs in the utility and what they contain. Use the **Available Network** tab to connect to a wireless network within range of the adapter.

Some basic device controls are shown at the bottom of the interface:



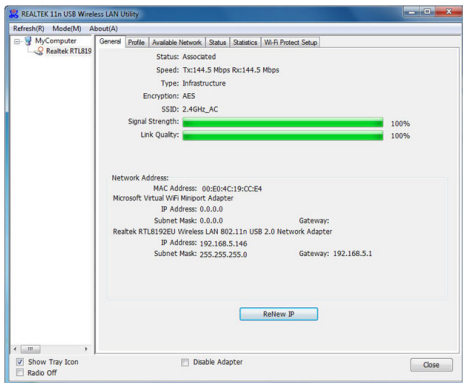
Show Tray Icon – Show / Hide the tray icon.

Radio Off – Disable the wireless radio.

Disable Adapter – Disable the device.

## General Tab

Displays information related to the currently connected network.



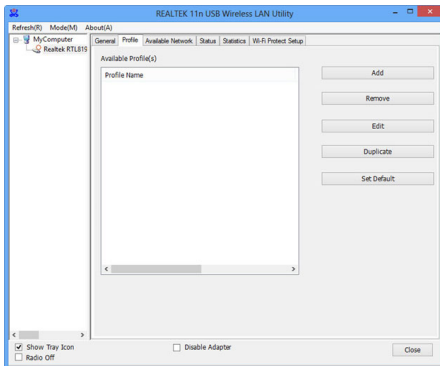
Signal Strength – Strength of the link between the adapter and the connected AP.

Link Quality – Measurement of transmit / receive performance over the radio.

Renew IP button – Refresh IP settings between the adapter and the connected AP

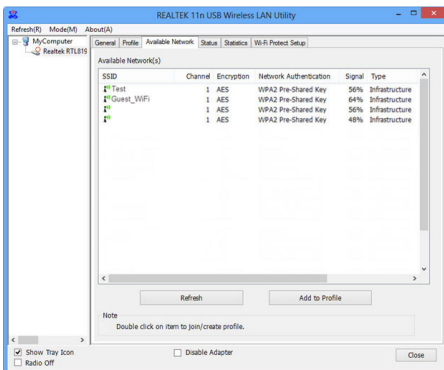
## Profile Tab

Add, Remove, Edit, Duplicate or Set Default wireless profiles.



## Available Networks Tab

Displays a site survey of networks within range of the adapter.

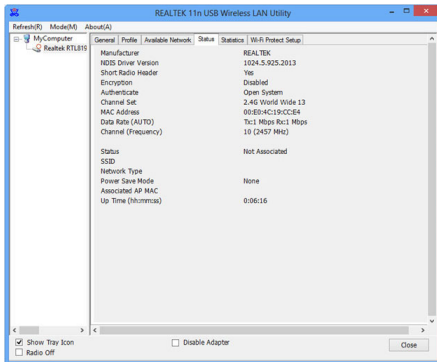


Refresh – Rescan for available networks.

Add to Profile – Select a network from the list and click to create a profile for that network.

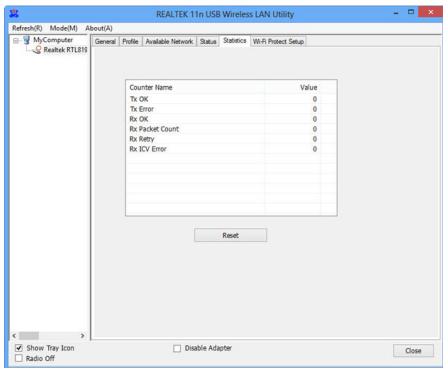
## Status Tab

Add, Remove, Edit, Duplicate or Set Default wireless profiles.



## Statistics Tab

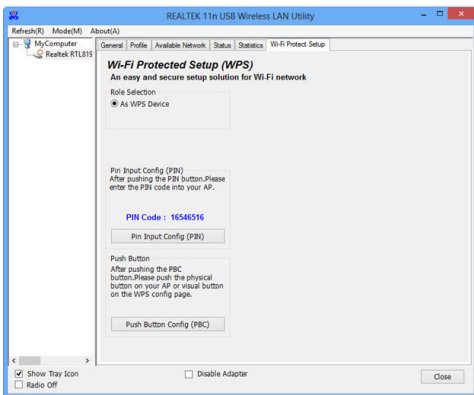
Displays connection transmit / receive statistics.



Reset – Resets all counters.

## WPS Setup Tab

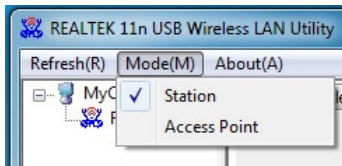
Allows for WPS PIN code and Push Button activation.



## Access Point Mode

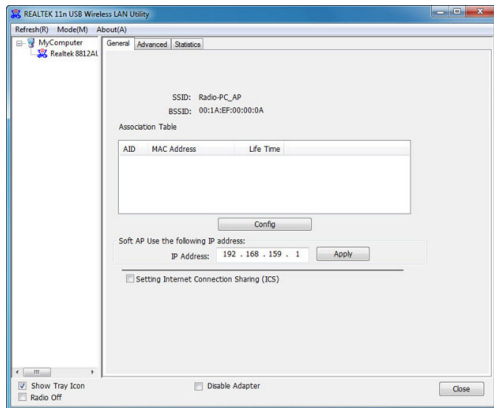
The device can also act as a Wireless Access Point, allowing other devices to connect and gain Internet access through it.

Switch modes using the Mode menu at the top of the interface:



## General Tab

Displays general information about the device in AP mode and a list of joined APs.



SSID - The network name of this AP.

BSSID - The MAC address of this AP.

### Association Table

Displays the list of joined stations to this AP.

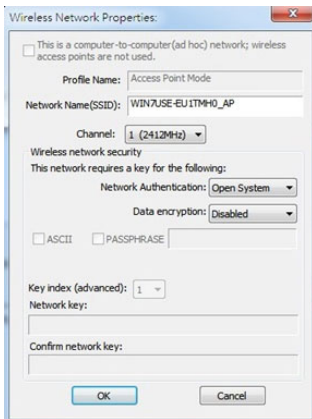
AID (Association ID) – A unique 16-bit ID value assigned by an AP during association.

MAC address - The MAC address of each joined station.

Life Time – A keep alive timer that counts down from 10 minutes after the successful connection of a station. If a station associated this AP does not have any interaction with the AP in 10 minutes, it will be disassociated from the Infra-structure.

Config – Opens a dialog of for modifying AP settings (shown below).

ICS (Internet Connection Sharing) - Enables this AP to share this internet/intranet network connection.



**Network Name (SSID)** - The network name of the AP, searchable by other wireless nodes. The length of SSID should be shorter than 32 characters.

**Channel** - Select your preferred wireless channel.

**Network Authentication & Data Encryption** – Choose your desired Authentication type and Encryption method from: Open System, Shared Key + WEP, WPA-PSK + TKIP & WPA2-PSK + TKIP (recommended).

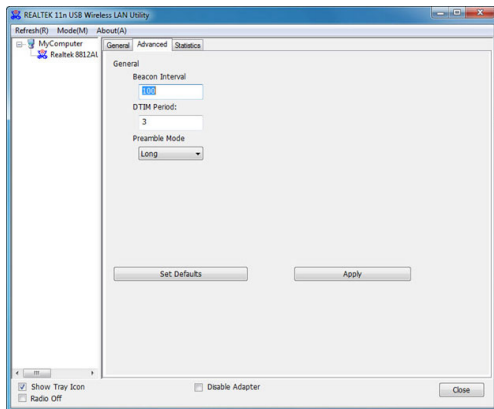
**ASCII** - Provide either 5 or 13 ASCII characters in the Network key field.

**PASSPHRASE** - Input a sequence of words as the network key.

**Key index (advanced) (1 ~4)** - At most four key index to represent the opposite network key.

## Advanced Tab

Provides advanced configuration options for the AP.



**Beacon Interval** – The frequency at which the beacon packet is sent, In TU unit (1024 micro-seconds).

**DTIM Period** - The number of Beacon intervals between successive DTIMs.

**Preamble Mode:**

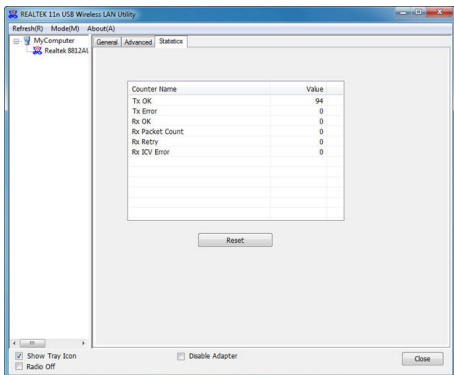
Long - Higher quality but with lower performance than preamble short mode.

Short - Normal quality but with higher performance than preamble long mode.

Auto - Select the proper preamble mode by current signal frame information.

## Statistics Tab

Displays connection transmit / receive statistics.



## Mac OS

### Realtek Utility

Open the WLAN Dual Band Utility from the Applications folder. The following sections outline the tabs in the utility and what they contain. Use the Available Network tab to connect to a wireless network within range of the adapter.

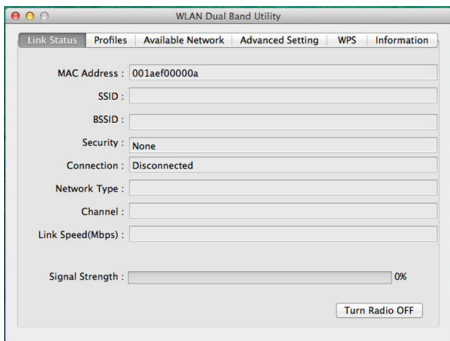


WLAN Dual Band  
Utility



## Link Status Tab

Displays information related to the currently connected network.

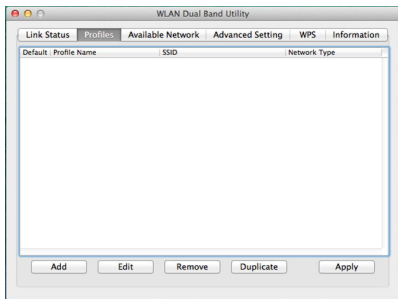


Signal Strength – Strength of the link between the adapter and the connected AP.

Radio Off – Disable the wireless radio.

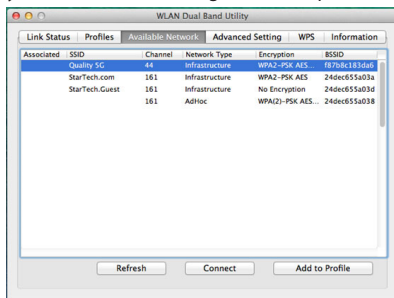
## Profiles Tab

Add, Remove, Edit, Duplicate or Set Default wireless profiles.



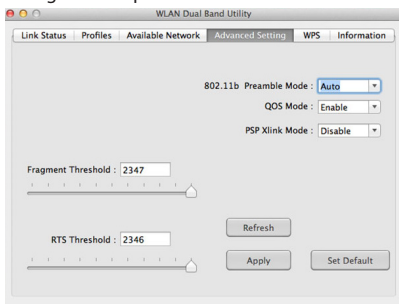
## Available Networks Tab

Displays a site survey of networks within range of the adapter



## Advanced Settings Tab

Provides advanced configuration options for the device.



### Preamble Mode:

Long - Higher quality but with lower performance than preamble short mode.  
Short - Normal quality but with higher performance than preamble long mode.  
Auto - Select the proper preamble mode by current signal frame information.

QoS Mode – Enable / Disable packet prioritization.

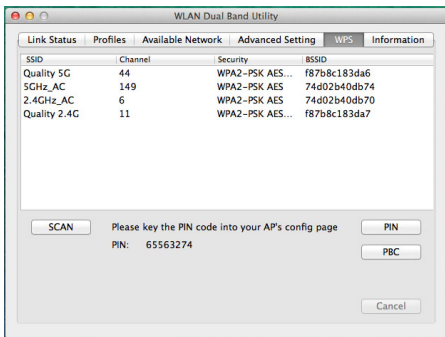
PSP Xlink Mode – Enable / Disable PSP Xlink support.

Fragment Threshold – Specify the size at which large packets should be fragmented.

RTS Threshold – Enable RTS/CTS for packets over the specified size.

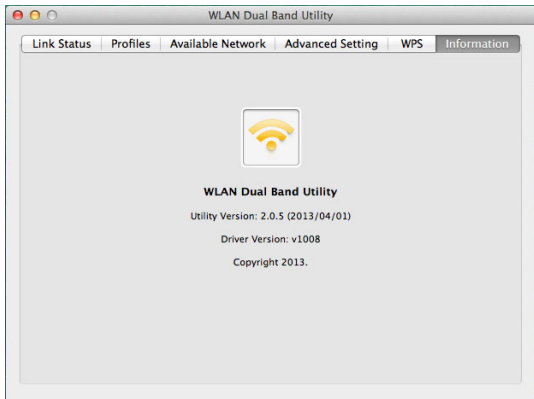
## WPS Tab

Allows for WPS PIN code or Push-button modes.



## Information Tab

Displays utility and driver version information.



# Specifications

<b>Host Interface</b>	USB 2.0
<b>Chipset</b>	Realtek - RTL8192EU
<b>External Connectors</b>	1 x USB A Male
<b>Supported Standards</b>	IEEE 802.11b, IEEE 802.11g, IEEE 802.11n
<b>Antenna Configuration</b>	2x2:2 (TxR:S)
<b>Wireless Frequencies</b>	2.400GHz ~ 2.484GHz
<b>Supported Security Schemes</b>	64/128 bit WEP, WPA, WPA2 (TKIP/AES)
<b>Operating Temperature</b>	0°C ~ 40°C (32°F ~ 104°F)
<b>Storage Temperature</b>	-40°C ~ 70°C (-40°F ~ 158°F)
<b>Humidity</b>	10% ~ 90% RH (Non-condensing)
<b>Dimensions</b>	22 x 16 x 8mm
<b>Weight</b>	2.5g
<b>Compatible Operating Systems</b>	Windows® 8 / 8.1 (32/64bit), 7 (32/64), 10 (32/64), Vista(32/64), XP(32/64) Windows Server® 2012, 2008 R2, 2003(32/64) Mac OS® 10.4 and up (Tested up to 10.9) Linux kernel 2.6.18 – 2.6.38

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