WIRELESS NETWORKING

MWN-USB150N WIRELESS N USB ADAPTER

MEDIALINK®

Users Guide

Copyright Statement

MEDIALINK is a registered trademark of Medialink Products, LLC. All products and product marks mentioned herein are the trademarks or registered trademarks of their respective holders. Copyright of the entire product, including its accessories and software, belongs to Medialink Products, LLC. No individual or party is permitted to copy, plagiarize or imitate this product without the expressed written consent of Medialink Products, LLC.

All the photos and product specifications mentioned in this guide are for references only. As there may be future upgrades to software and hardware, Medialink Products cannot be not be responsible for informing users about changes to this product or its software. For more information, visit our website at www.medialinkproducts.com .

FCC 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.
2) This device must accept any interference received, including interference that may cause undesired operation.

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

FCC RF Radiation Exposure Statement

This device has been tested for compliance with FCC RF Exposure (SAR) limits in the typical laptop computer configuration and this device can be used in desktop or laptop computers with side mounted PCMCIA slots. This device cannot be used with handheld PDAs (personal digital assistants). This device and its antenna must not be co-located or operated in conjunction with any other antenna or transmitter.

CE Mark Warning

CE 1588 !

This is a class B product. In a domestic environment, this product may cause radio interference, in which case the user may be required to take adequate measures.

Table of Contents

COPYRIGHT / FCC STATEMENT 1-2
TABLE OF CONTENTS ..... - 3 -
INTRODUCTION.....4
PRODUCT FEATURES.....5
PACKAGE CONTENTS 5
INSTALLATION GUIDE 6
INSTALL SOFTWARE 7
CLIENT UTILITY INTERFACE 11
STATION MODE.....11
Station Mode Topology.....11
STATION MODE - "STATUS" TAB.....12
STATION MODE - "SITE SURVEY" TAB.....13
STATION MODE - "PROFILE MANAGEMENT" TAB 14
STATION MODE - "STATISTICS" TAB.....15
STATION MODE - "WPS SETTING" TAB 16
AP MODE – GENERAL INFO 17
AP MODE - BASIC SETTING.....18
AP MODE - SECURITY SETTING 19
AP MODE - ACCESS CONTROL.....20
AP MODE - ABOUT TAB 21

Appendix One: Acronyms and Terms 22

Appendix Two: Product Specification 23

Appendix Three: How to connect with PSP...24

Introduction

Your Medialink MWN-USB150N utilizes the latest standard in wireless networking technology, 802.11n (Draft 2.0). This state of the art standard increases transmission range, increases throughput and reduces “dead spots”.

This adapter was carefully designed to make installation as simple as possible. In most cases, even the most novice user will complete installation within just a few minutes.

WPS (Wi-Fi Protected Setup) simplifies password entry and frees you from having to remember long passwords.

Support for PSP, NDS and WII connections with Xlink Kai allows for a rich on-line gaming experience.

The Medialink MWN-USB150N is a high performance Wireless N USB Adapter with improved range, faster throughput and state of the art security.

Product Features

- EZ Install – Simplified Installation via Graphical User Interface.
- Microsoft WHQL Certification ensures compatibility with Windows OS.
- Supports Windows 2000, XP, Vista 32-Bit, Vista 64-bit, Linux & MAC.
- Complies with 802.11n (Draft 2.0), 802.11g and 802.11b standards.
- High Speed USB 2.0 port, backward compatible with USB1.0.
- 150Mbps maximum send/receive throughput.
- Supports 20MHz/40MHz frequency bandwidth.
- Auto-detects network transmission rate.
- Provides Both Infrastructure and Ad-Hoc mode.
- Supports Soft AP to Quickly Establish Wireless LAN Networking.
- Supports PSP, WII, NDS with Xlink Kai for on-line gaming.
- Supports 64/128-bit WEP, WPA, WPA2 encryption methods and 802.1x security authentication standard.
- Supports WPS (Wi-Fi Protected Setup) encryption method to eliminate the need to remember long passwords.
- Supports WMM to make voice and video as smooth as possible.

Package Contents

Unpack the contents of your USB Adapter, and locate the following items:

- Wireless USB Adapter
- USB Seat
- Installation CD
- Quick Installation Guide

Installation Guide

IMPORTANT NOTE - DO NOT INSERT YOUR MEDIALINK WIRELESS USB ADAPTER INTO YOUR COMPUTER USB PORT UNTIL AFTER THE SOFTWARE IS INSTALLED.

Please follow the simple steps in this Guide to get your computer quickly connected to your wireless network.

Before you begin, please be sure you have the following:

- PC with an available USB slot
- Minimum 300MHz processor and 32MB memory
- Windows 2000, XP, Vista 32-bit, Vista 64-bit (For Linux or MAC instructions, please refer to “USER MANUAL” on the installation CD).
- An 802.11n, 802.11g or 802.11b Access Point or Router

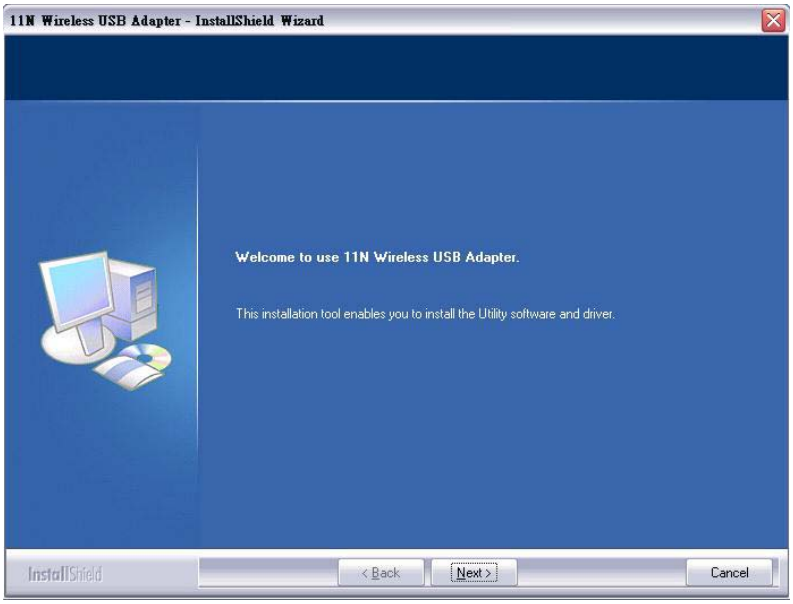
Install Software

STEP 1. Insert CD into an available CD-ROM drive.

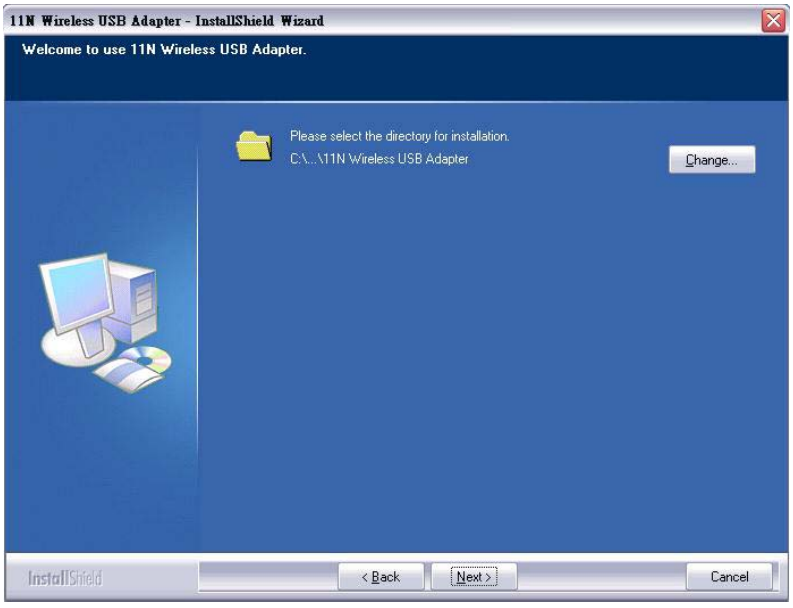
NOTE: *The following Screen shots illustrating the installation procedure are from a Windows XP installation. Other operating systems may show slightly different dialogue boxes but the installation procedures will be the same.*

STEP 2. Click ***Install Software***

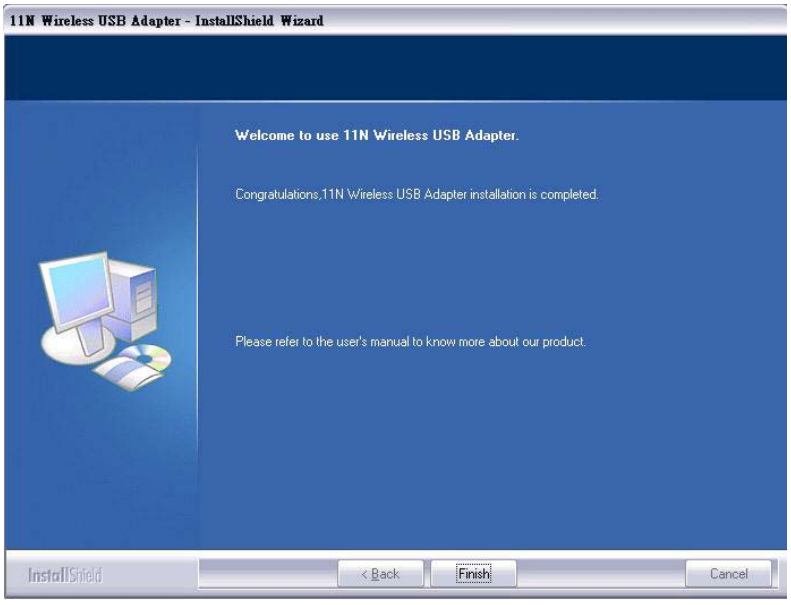
STEP 3. Click ***Next*** to start installation.



STEP 4. Click ***Next*** to continue. (Installation may take a few minutes. Please wait.)

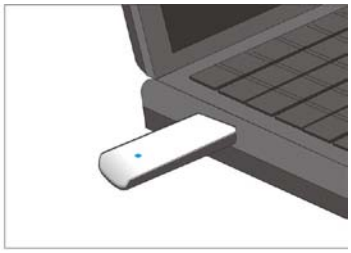


STEP 5. Click ***Finish*** to complete the software installation.



STEP 6. Insert the USB Adapter into an available USB slot.

Or



Please wait while hardware drivers are installed.

(For Windows 2000 & Windows Vista you will be prompted to restart your computer)

STEP 7. Connect to your network

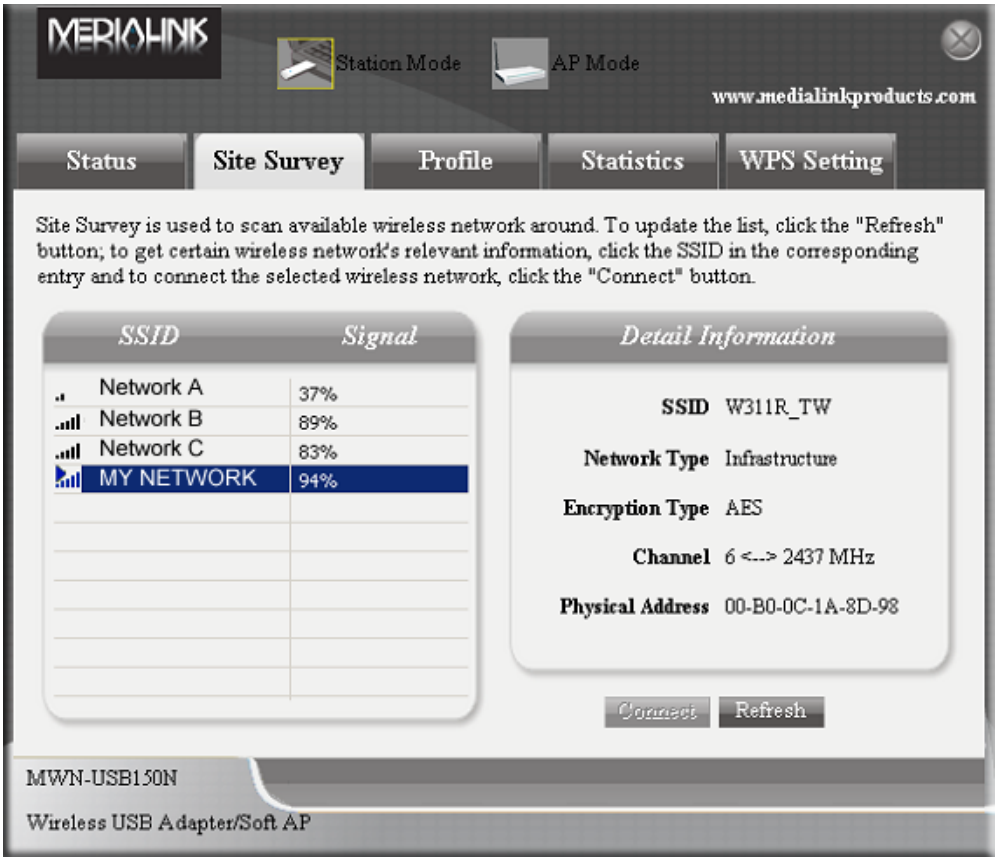
You will see a tray icon appear in your system tray at the bottom of the screen after the software and hardware installation are completed successfully.

STEP 8. Double-click the tray icon to launch the configuration utility.

STEP 9. Click on the SITE SURVEY tab.

STEP 10. Select your network and click CONNECT.

Note - *If your router has security enabled, please insert your router password and wait for your router authentication.*



The tray icon will turn green to indicate communication with the router. CONGRATULATIONS! You're Medialink adapter is now successfully connected to your wireless network.

Chapter 3 Client Utility Interface

The Medialink configuration utility is used for management of the Medialink MWN-USB150N Wireless USB Adapter. To access it's features, double-click the tray icon to launch the configuration utility. If the tray icon is not present, Click "Start", "All Programs" "Medialink" and finally "MWN-USB150N"; or click the Medialink shortcut on your PC's desktop.

⚠ ***Note:***

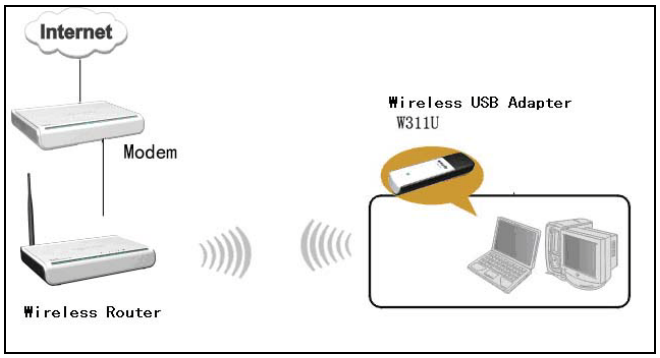
With Windows XP, users can select either the Medialink Client Utility Interface or the Windows XP internal wireless application to configure and manage the Medialink MWN-USB150N wireless adapter.

There are two client utility applications available from the Medialink Client Utility Interface: Station mode and AP mode.

⚠ ***Note:***

Station Mode is the default mode and is the best mode to use when connecting to a wireless router.

Station Mode



Station Mode Topology

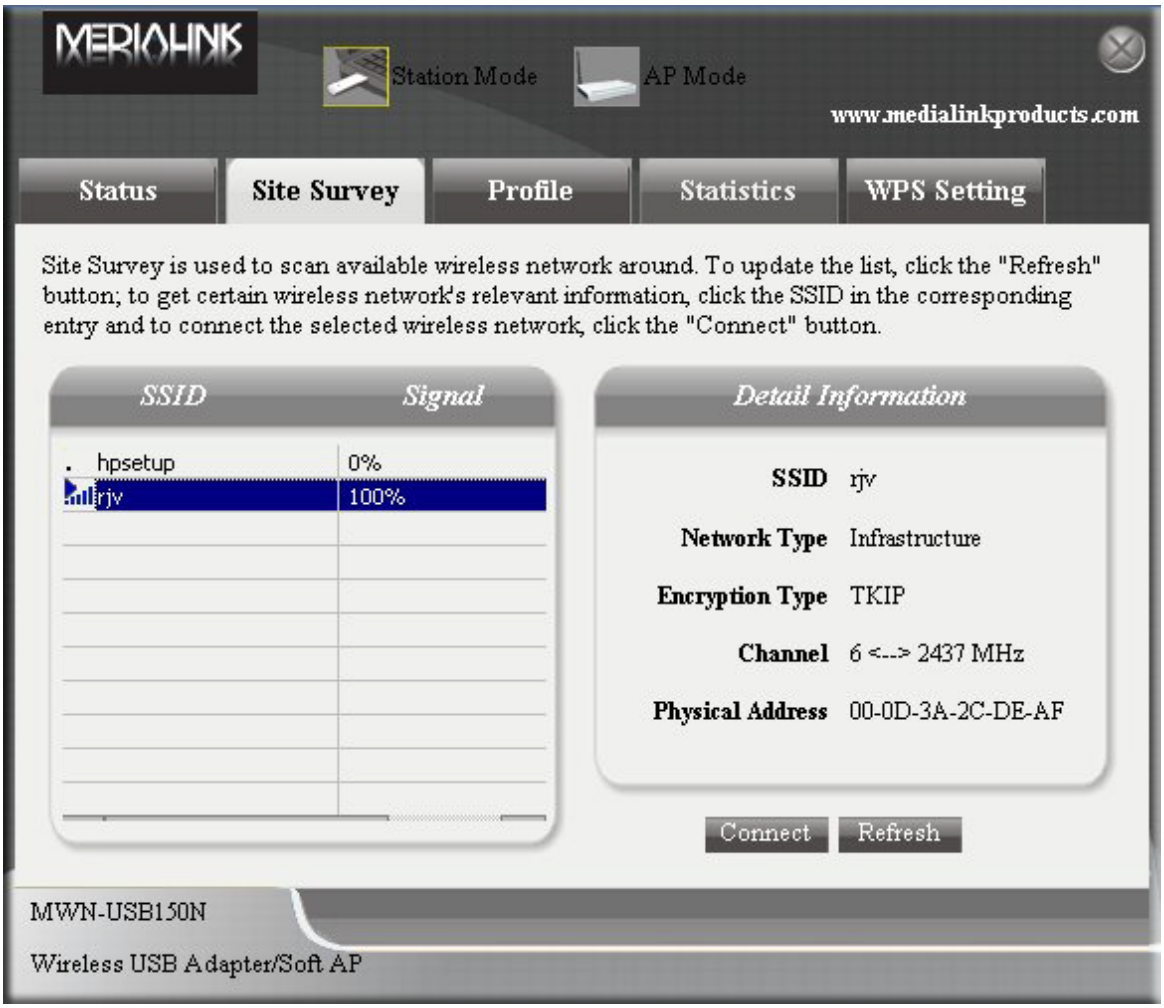
In Station Mode, the MWN-USB150N serves as a wireless client to receive wireless signals from a wireless router in order to access the Internet.

Station Mode - “Status” Tab

When the “STATUS” tab is selected, the wireless network status, SSID, Authentication type, Encryption Type, IP address, subnet mask and gateway are displayed.

Station Mode - “Site Survey” Tab

The “SITE SURVEY” tab is used to scan and display the available wireless networks. The signal strength of the available networks along with the encryption type will also be displayed.

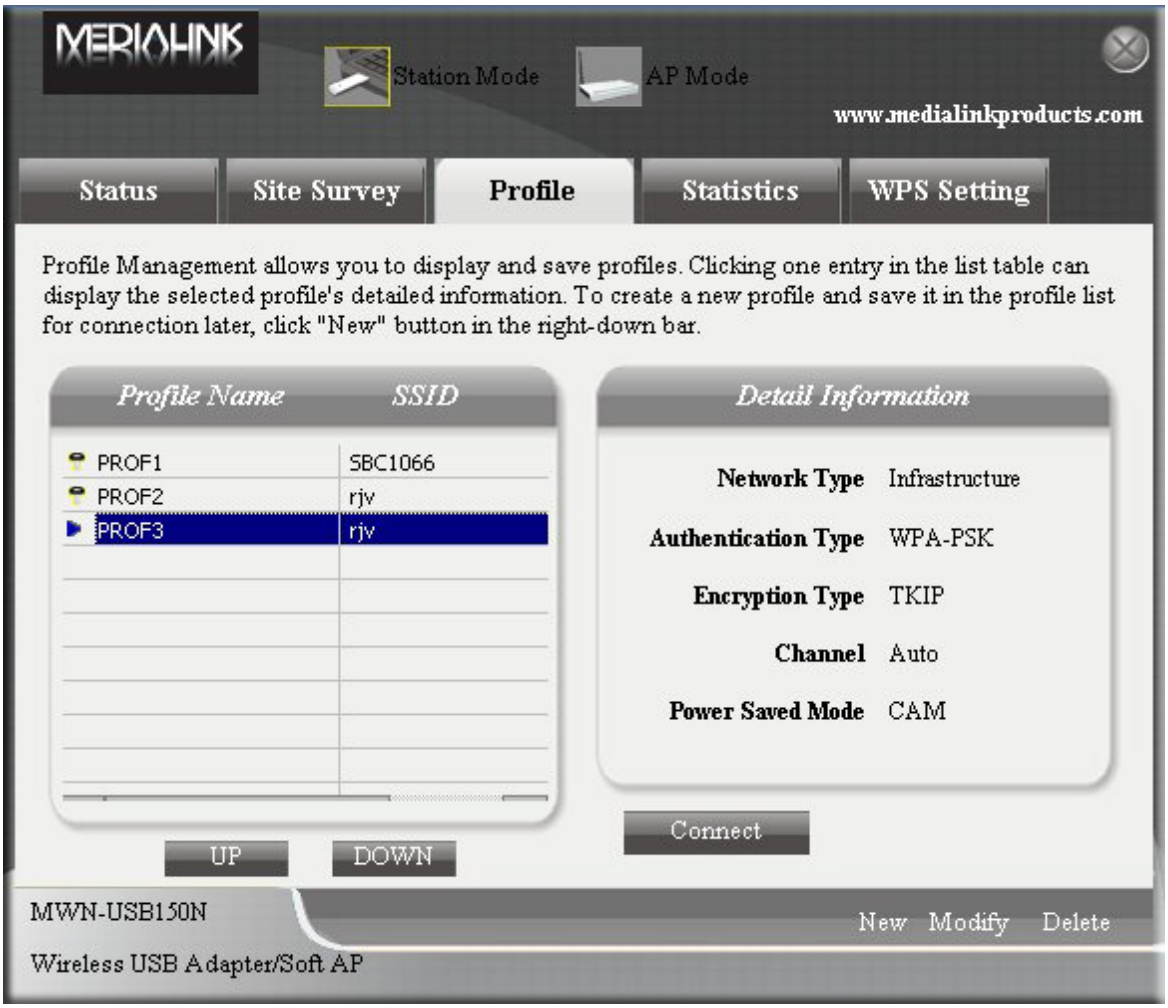


Click Connect: to select and connect to the desired network.

Click Refresh: to rescan for available wireless networks.

Station Mode - “Profile Management” Tab

The “PROFILE” tab allows you to save multiple profiles for quick connection to various networks.



Click UP / DOWN: To change a profile’s sequence in the list.

Click Connect: To activate an existing profile.

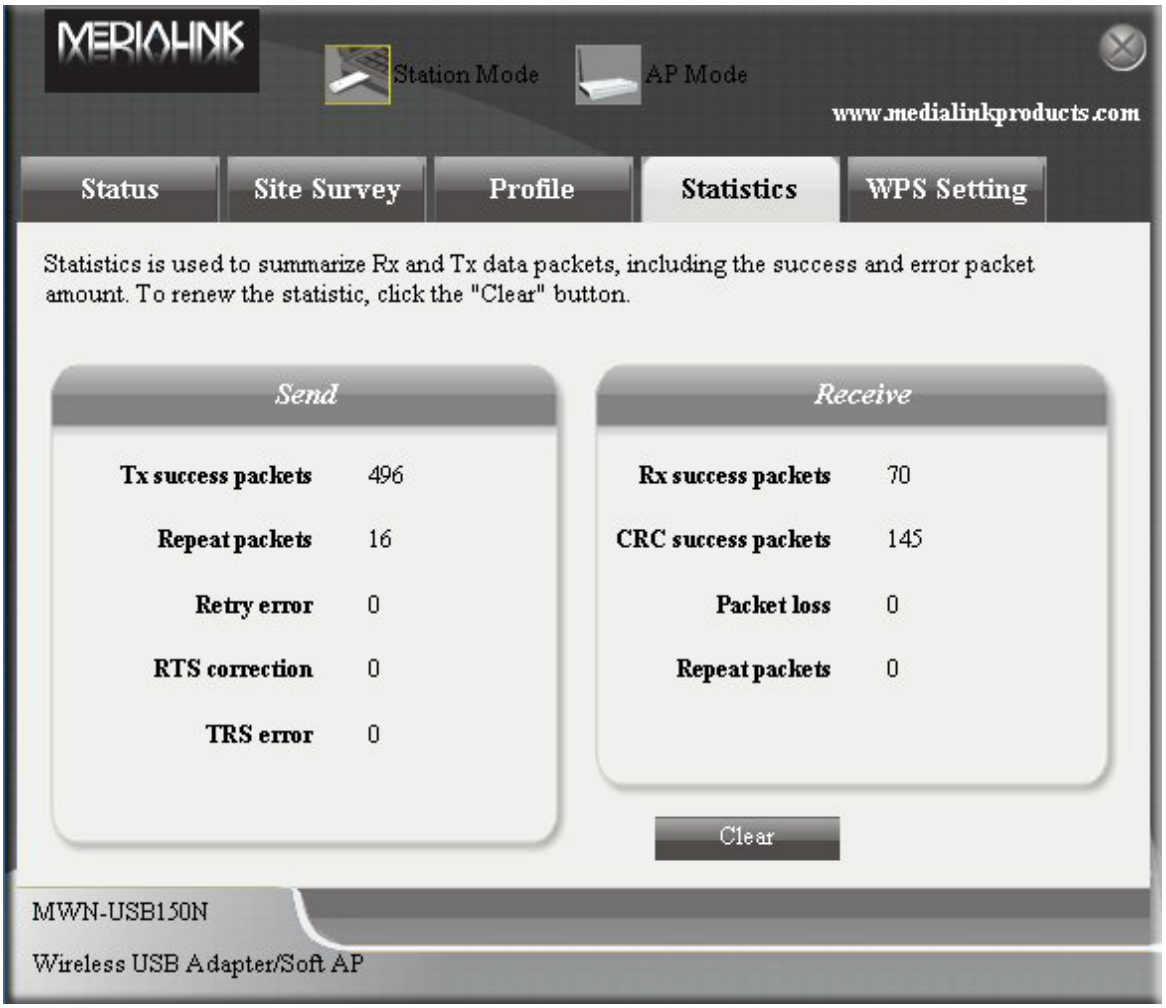
Click New: To create a new profile and configure the site status and security setting.

Click Modify: To modify an existing profile.

Click Delete: To delete an existing profile.

Station Mode - “Statistics” Tab

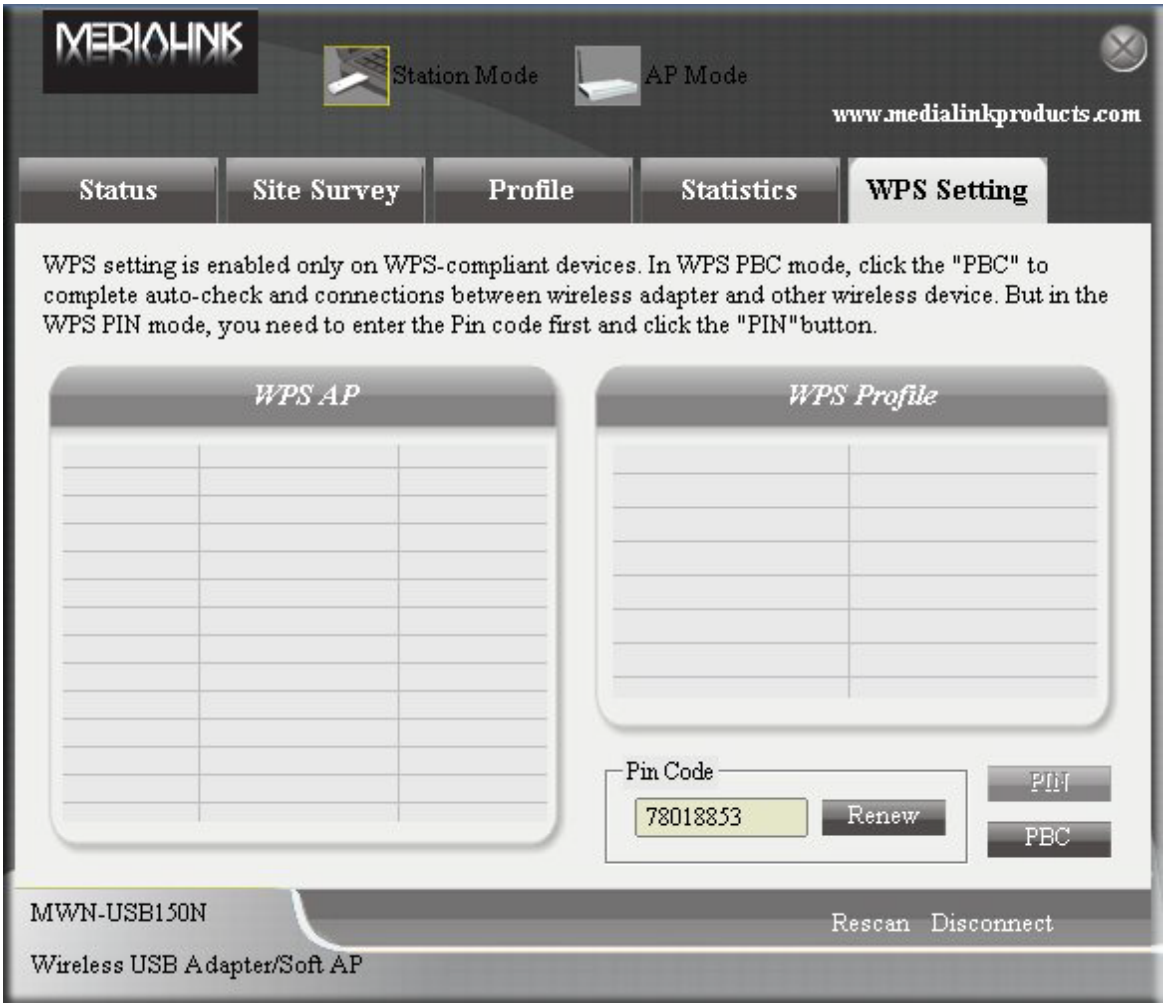
The “STATISTICS” tab is used to display Rx and Tx data packets, including the success and error packet amount.



Click Clear: to refresh the statistics.

Station Mode - “WPS Setting” Tab

The WPS is available only when used with WPS-compliant routers.



PIN : Enter the Pin code and click “PIN” to automatically connect the wireless adapter to available networks.

PBC : Click “PBC” to auto-check available connections.

Refresh: To update the Pin code.

Rescan: To rescan for available WPS-compliant wireless networks.

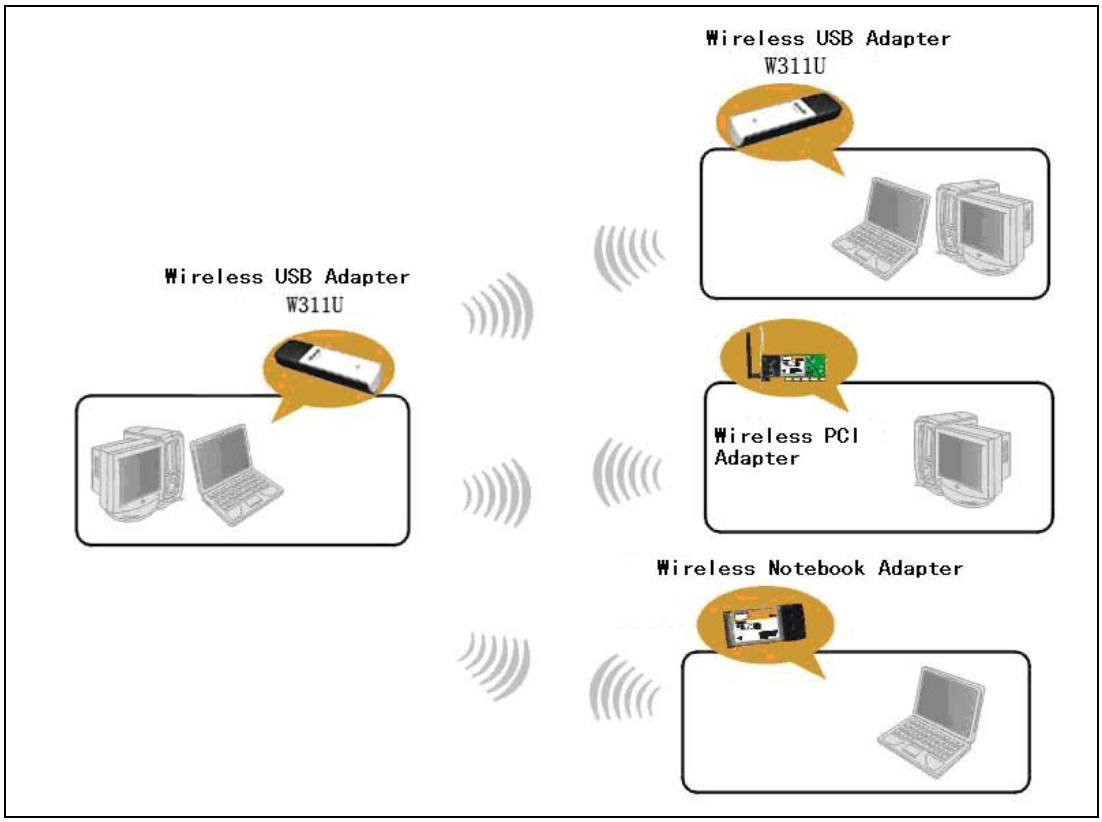
Connect: To connect the WPS wireless network.

Disconnect: To disconnect from the current connected wireless network.

AP Mode – General Info

In cases where wireless access to an Ethernet network is desired, the Medialink MWN-USB150N can serve as an access point to transmit wireless signals and to allow other wireless clients to access the network.

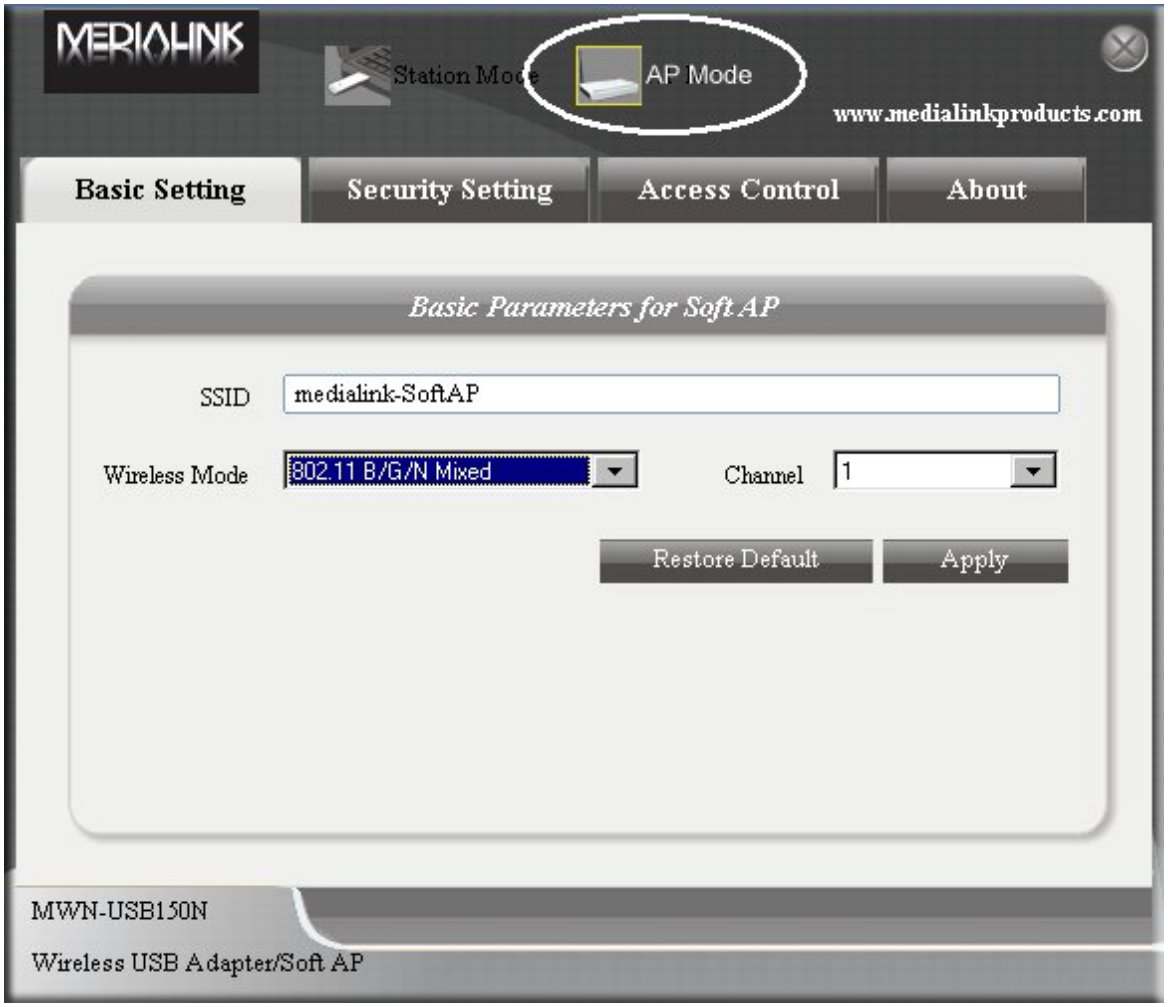
⚠ ***Note:*** AP Mode does not take the place of a router or modem which is required for internet access.



AP Mode Topology

AP Mode - Basic Setting

This window is used to configure the AP's basic parameters, including SSID, Wireless Mode and Channel.



SSID: Here you can give your AP a Wireless Network ID name (SSID).

Wireless Mode: Here you can set the AP to operate at 802.11b, 802.11g, or 802.11b/g/n mixed.

Channel: 1~11 channels provided.

Restore Default: to restore the set parameters to default factory default settings.

Apply: to make the changes made take effect.

AP Mode - Security Setting

This window is used to configure the wireless network's security authentication, providing WEP, WPA-PSK, WPA2-PSK, and WPA-PSK/WPA2-PSK encryption methods.

WEP : 10/26 bits Hex or 5/13 ASCII support.

WPA-PSK : 8~32 bits ASCII support.

WPA2-PSK : 8~32 bits ASCII support.

WPA-PSK/WPA2-PSK : 8~32 bits ASCII support.

⚠ ***Note:***

1. The Hex characters include 0~9 numbers and a~f letters.
2. ASCII characters include any numbers/letters and characters.

AP Mode - Access Control

Access Control uses client MAC addresses to allow or disallow access to the network.

Filter Policy:

Disabled: Disables the filter function.

All Permitted: Permits all clients in the list to access the wireless network.

All Blocked: Blocks all clients in the list from access to the wireless network.

MAC Address : Input the client's MAC address to implement the corresponding filter policy.

Add: Adds the entered MAC address into the list.

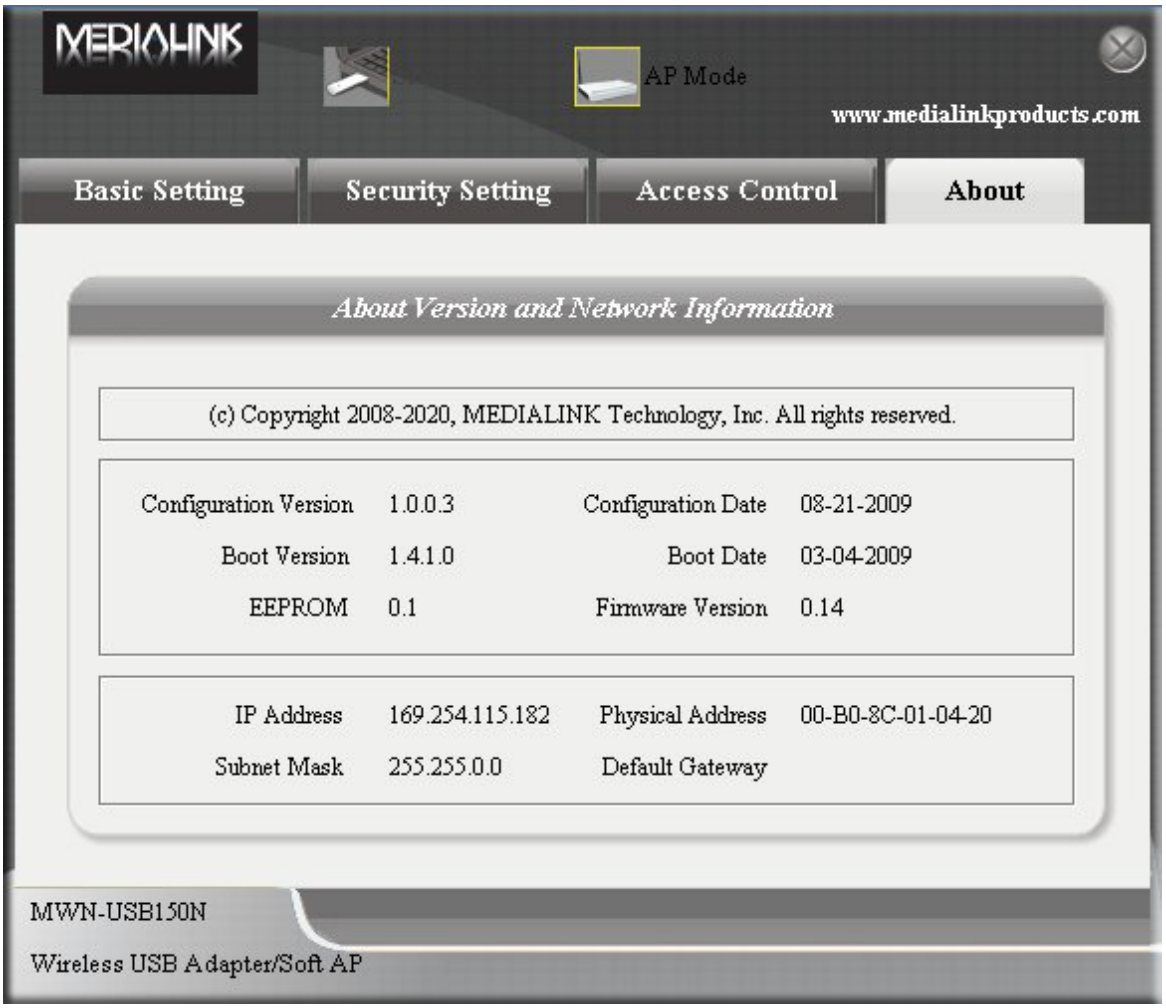
Delete: Deletes one selected MAC address in the list.

Remove All: Deletes all listed client MAC addresses.

Apply: Makes the changes take effect.

AP Mode - About TAB

This window displays details about the software version and wireless adapter.



Appendix One: Acronyms and Terms

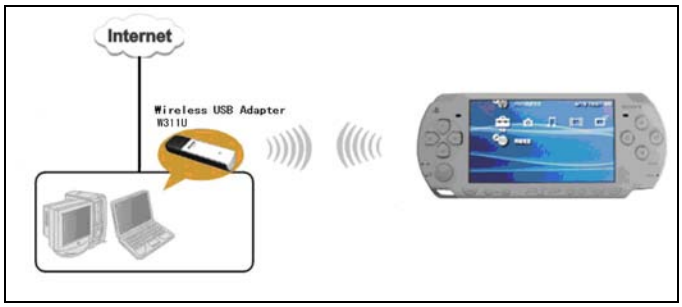
WLAN	Wireless Local Area Network
802.11	A family of specifications developed by the IEEE for WLAN technology.
802.11a	An extension to 802.11 WLAN standard that provides up to 54 Mbps transmis- sion in the 5 GHz UNI radio band.
802.11b	An extension to 802.11 WLAN standard that provides up to 11 Mbps transmission in the 2.4 GHz ISM radio band. 802.11b uses DSSS modulation.
802.11g	An extension to 802.11 WLAN standard that provides up to 54 Mbps transmission in the 2.4 GHz ISM radio band. 802.11b uses OFDM modulation and is backwards compatible with 802.11b.
Ad-Hoc	A group of computers each with wireless adapters, connected as an independent WLAN.
AES	Advanced Encryption Standard
BSSID	Basic Service Set ID
DHCP	Dynamic Host Configuration Protocol
DSSS	Direct Sequence Spread Spectrum. DSSS is one of two types of spread spectrum radio. The other is frequency-hopping spread spectrum (FHSS).
QoS	Quality of Service
OFDM	Orthogonal Frequency Division Multiplexing
RADIUS	Remote Authentication Dial In User Service
RTS	Request to Send
SSID	Service Set Identifier. A 32-character unique identifier attached to the header of packets sent over a WLAN that acts as a password when a mobile device tries to connect to the BSS.
TCP/IP	Transmission Control Protocol/Internet Protocol
TKIP	Temporal Key Integrity Protocol
WDS	Wireless Distribution System
WEP	Wired Equivalent Privacy. A security protocol for WLANs defined in the IEEE 802.11 standard.
WPA	Wi-Fi Protected Access
WPA2	Wi-Fi Protected Access 2. The next generation of Wi-Fi security, based on the 802.11i standard.
WPA2-PSK	Wi-Fi Protected Access 2-Pre-shared Keys
WPA-PSK	Wi-Fi Protected Access-Pre-shared Keys

Appendix Two: Product Specification

Standard	IEEE802.11g, IEEE802.11b, IEEE802.11n
Port	USB2.0
Frequency Range	2.4GHz
Transmission Rate	130Mbps, 117Mbps, 104Mbps, 78Mbps, 52Mbps, 39Mbps, 26Mbps, 13Mbps, 65Mbps, 58.5Mbps, 52Mbps, 39Mbps, 26Mbps, 19.5Mbps, 13Mbps, 6.5Mbps, 54 Mbps, 48 Mbps, 36 Mbps, 24 Mbps, 18 Mbps, 12 Mbps, 9 Mbps, 6 Mbps, 11 Mbps, 5.5 Mbps, 2 Mbps, 1 Mbps
Transmission Power	Max. 15dbm
Modulation Method	OFDM, CCK
Working Temper.	0℃~40℃
Storage Temper.	-40℃~70℃
Working Humidity	10%~90%RH non-condensing

Appendix Three: How to connect with PSP

1. Topology of PSP connecting with MWN-USB56N



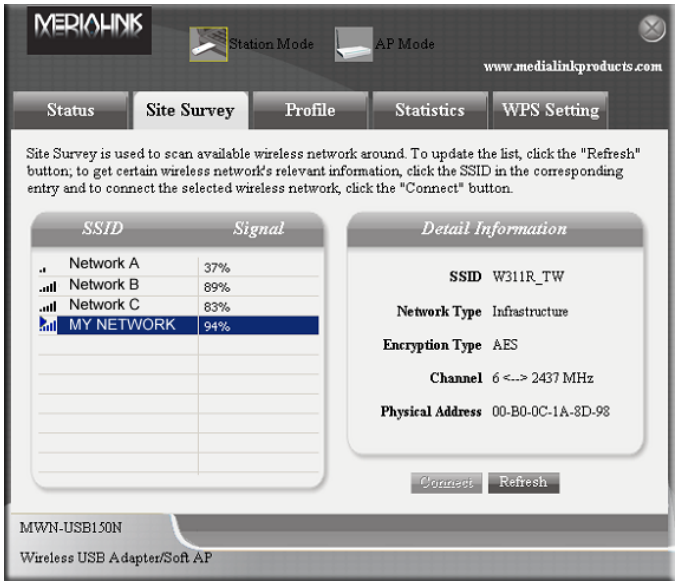
2. To configure PSP with Ad-Hoc mode

2.1 Select Network Settings

2.2 Select Ad-Hoc mode

2.3 Select Channel

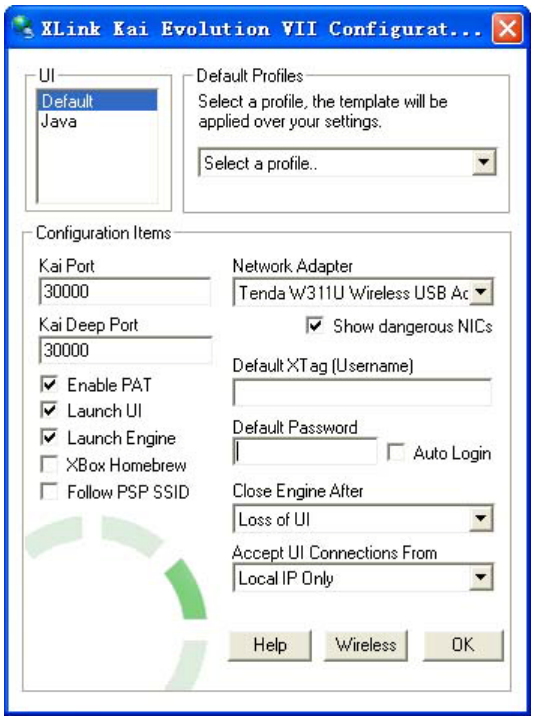
3. In MWN-USB56N Utility Interface scan PSP and double-click to connect the wireless network.



4. Check “enable PSP connection mode” box.

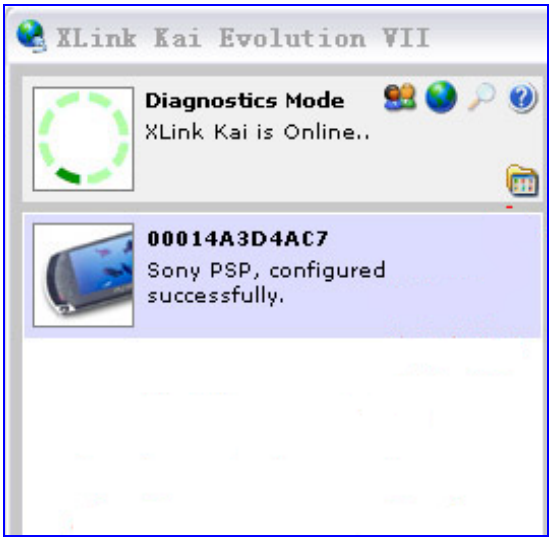
5. To configure Xlink Kai

Select “Start”→ “All programs” → “Xlink Kai Evolution VII” → “Start Kai Config” to configure the user name, password and other parameters as follows.



6. Login Xlink Kai

Select “Start”→ “All programmers” → “Xlink Kai Evolution VII” → “Start Kai”. PSP will connect with Xlink Kai automatically. The following window will indicate the connection is established.



Thank you for purchasing this Medialink product! Please contact us if you need any assistance with installation. We'll be happy to help!

Medialink Products, LLC
1951 Old Cuthbert Rd., Ste 301
Cherry Hill, NJ 08034-1411

Technical Support Hotline: 856-216-8222
Technical Support E-Mail: support@medialinkproducts.com