150Mbps Wireless USB Adapter   User Manual

NEXXT

S O L U T I O N S

150Mbps Wireless USB Adapter
User's Manual

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Chapter 1 Introduction

LYNX 150 utilizes the latest wireless networking technology, IEEE802.11n (Draft 2.0), and can be greatly compatible backwards with 802.11b/g standards, which multiples wireless transmission range and reduces "dead spots" in the wireless coverage area.

Soft AP supported by LYNX 150 can help you establish wireless LAN networks fast. Besides, WPS (Wi-Fi Protected Setup) encryption methods to avoid you memorizing long passwords. Moreover, complete WMM support makes your voice and video smoother. Supports PSP™, NDS™ and WII™ connection with Xlink Kai to enjoy on-line gaming.

All in all, LYNX 150 is a cost-effective Wireless-N USB Adapter with high-performance and further wireless coverage.

1.1   Product Features

- Complies with IEEE 802.11n (Draft 2.0), IEEE 802.11g and IEEE 802.11b standards
- Requires USB2.0 port
- Provides 150Mbps receiving rate and 150Mbps sending rate
- Supports 20MHz/40MHz frequency width
- Auto-detects and changes the network transmission rate
- Provides two work modes: Infrastructure and Ad-Hoc
- Supports Soft AP to establish your wireless LAN networks
- Supports PSP™, WII™ and NDS™ connecting with Internet and Xlink Kai to enjoy 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 avoid you memorizing

long passwords.

- Supports WMM to make your voice and video smoother.

- Easy-to-install, plug and play

1.2 Product Deployment

LYNX 150 Wireless USB Adapter offers fast, reliable and cost- effective solution for wireless access. Deployment as follows;

- For staff who requires higher mobility in the office, or who requires to have access to traditional wired or wireless network in any place of the company;

- Enterprise or individual who requires often changes in the layout of network cables;

- Companies or places which are not suitable for LAN cable laying out because of budget or objective of the building, including places of

great interests, rented places or places for short-term usage;

- Companies or individuals who avoid using expensive cables, renting cables or paying rights for access.

1.3 Indicator Description

In the front panel of $LYNX\ 150$, there is a LED indicator blinking when data communication is going on.

1.4 Package Contents

Unpack the packets, and please find the following items:

> ➢ One $LYNX\ 150$ 11N Wireless USB Adapter
> ➢ One CD-ROM

Chapter 2 Installation Guide

This chapter is to assist you to use the included CD-ROM which includes the Setup Wizard and the Client Utility Interface.

The following steps on Setup Wizard are taken from Windows XP as an example.

1. Please insert the Wireless USB Adapter into any USB port of your computer.

Or

2. When "Found New Hardware" system dialogue appears, select "Cancel" to use the included Setup Wizard for fast installation; of course, you can also select "Next" to install manually.

3. Insert the included CD-ROM into the CD-ROM drive of your computer, and the Welcome screen will appear. (If it does not appear, double click the "Setup.exe" icon.)
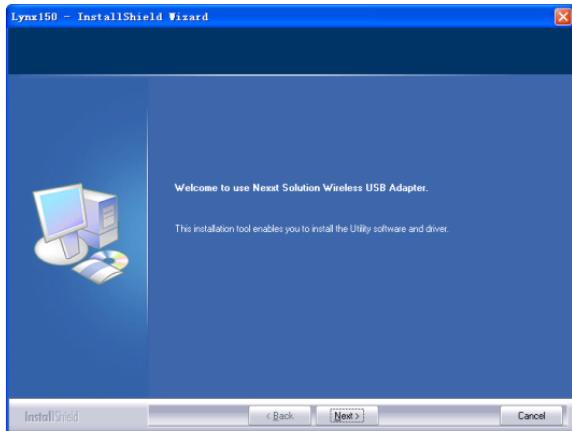
4. Click "Start".

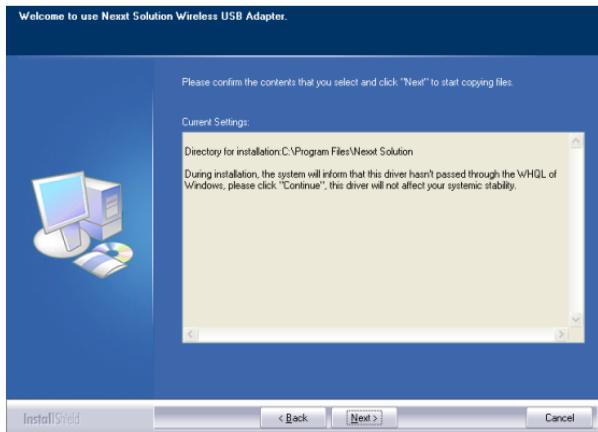
5. Click "Next" to start installing.
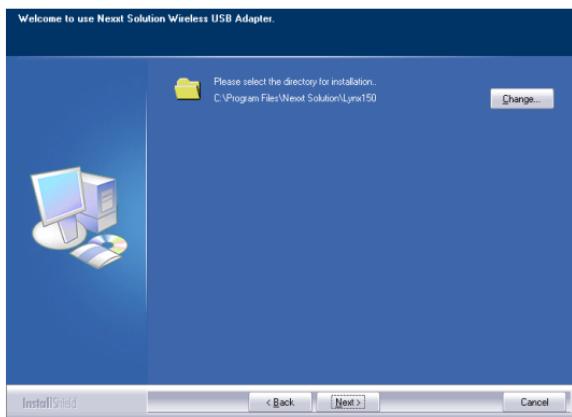
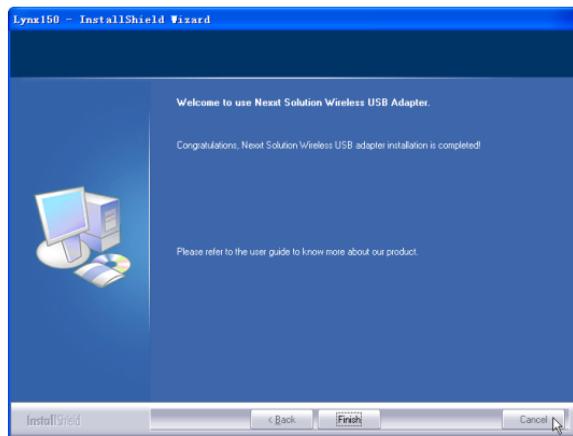6. Click "Change…" to select the directory path, or click "Next".

7. Select "OK" and "Next" in the following window.

8. During the installation, the following dialogue may appear. Click the "Continue Anyway" to continue. There is no security threat to your computer.

9.   Click "Finish" to complete the installation.

Chapter 3 Client Utility Interface

This software is for the $LYNX\ 150$ Wireless USB Adapter management. If it does not appear, select "Start"—"All Programs" —"Nexxt Solutions"—" $LYNX\ 150$ ", or click the shortcut on your PC's desktop.

⚠ *Note:*

In Windows XP, you can select the included $LYNX\ 150$ Client Utility Interface or the Windows XP internal wireless application to configure the device.
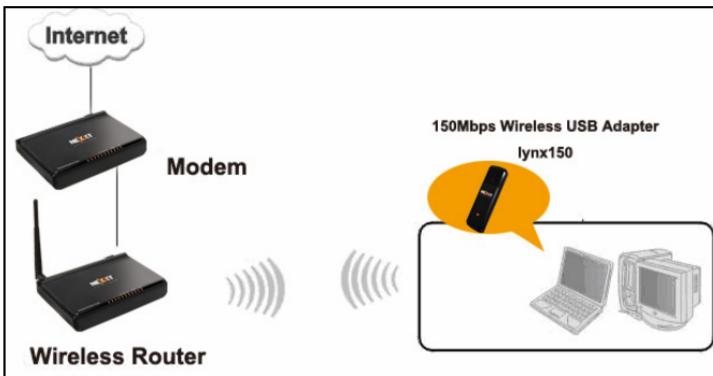
There are two client utility applications in $LYNX\ 150$: Station mode and AP mode.

⚠ *Note:*

In this utility interface, Station Mode (Client Mode) is the default access way.

3.1 Station Mode

3.1.1 Station Mode Topology

In this mode, LYNX 150 serves as a client to receive the wireless signals to access the Internet.

3.1.2 Status

In the Network Status window, it displays something on wireless adapter and wireless network status, including SSID, Authentication type, Encryption Type, IP address, subnet mask and gateway and so on.

3.1.3 Site Survey

The Site Survey is used to scan the available wireless network around, showing the wireless network's signal strength and other information which provides basis for you to access which wireless network.

Connect: select one entry in the wireless network list and click the button to connect the device with the selected network.

Refresh: rescan the wireless network around.

3.1.4 Profile Management

This window saves the general wireless parameters for different profiles, which are used to connect fast to the wireless network you need.

UP/DOWN: To change the profile's sequence in the list.
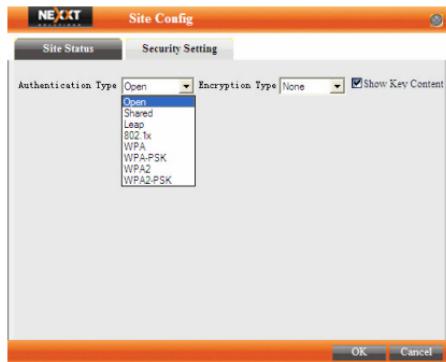
Connect: To activate one profile.

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

Modify: To modify one existing profile.

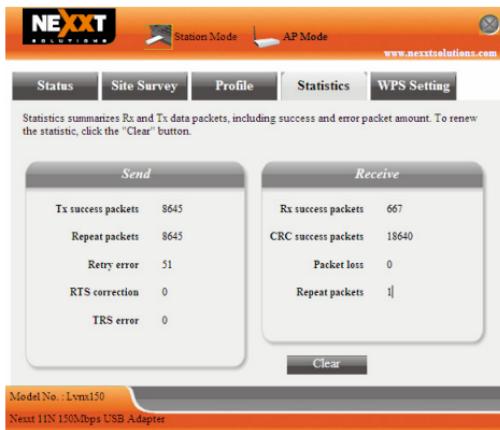**Delete:** To delete one existing profile.

(Site Status)

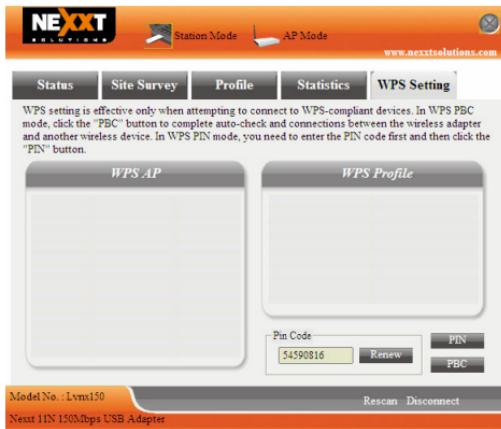(Security Setting)

3.1.5   Statistics

Statistics is used to summarize Rx and Tx data packets, including the success and error packet amount.

Clear: click this button to renew the statistics.

3.1.6   WPS Settings

WPS setting is enabled only on WPS-compliant devices.

PIN：Enter the Pin code and click the "PIN" to automatically connect the wireless adapter with wireless devices around.

PBC：Click the "PBC" to complete auto-check and connections between wireless adapter and other wireless device.

Refresh: to update the Pin code.

**Rescan**: to rescan the WPS-compliant wireless network around.

Connect: click this button to connect the WPS wireless network.

Disconnect: to disconnect the connected wireless network.

3.2 AP Mode
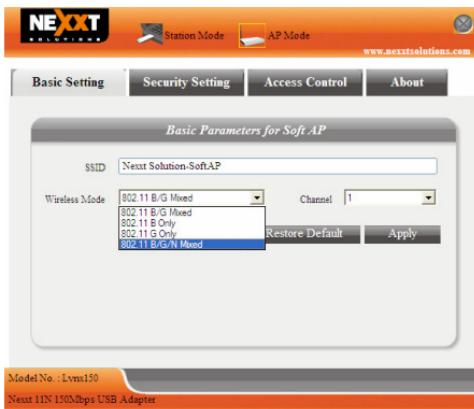
3.2.1 AP Mode Topology

The device also can serve as an access point to transmit wireless signals and create a wireless network, allowing other wireless clients to access the network.
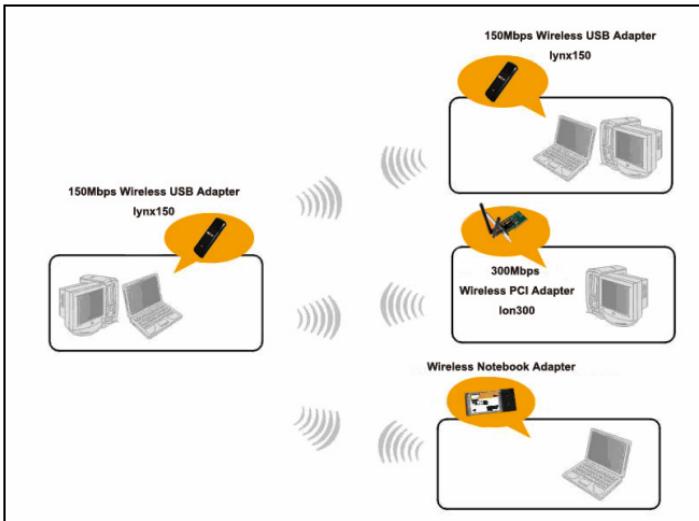
Click the AP Mode icon to enter the AP Mode interface.

3.2.2 Basic Settings

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

SSID: Wireless network's ID name scanned by wireless adapter.

Wireless Mode: 802.11b/802.11g/802.11b/g mixed.

Channel: 1~11 channels provided.

Restore Default: to restore the set parameters to

default factory default settings.

Apply: to make the changes established take effect.

3.2.3 Security Settings

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.

3.2.4 Access Control

Access Control is based on the MAC address to decide that the specified client connects to the wireless network, or disables it to access the wireless network.

Filter Policy:

Disabled: to disable the filter function.

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

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

MAC Address：to input the client's MAC address to implement the corresponding filter policy. For example: b0000a8cd702.

Add: to add the entered MAC address into the list.

Delete: to delete one existing MAC address in the list.

Remove All: to delete all clients' MAC address in the list.

Apply: to make the changes established take effect.

3.2.5   About

This window displays information about 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 transmission 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™
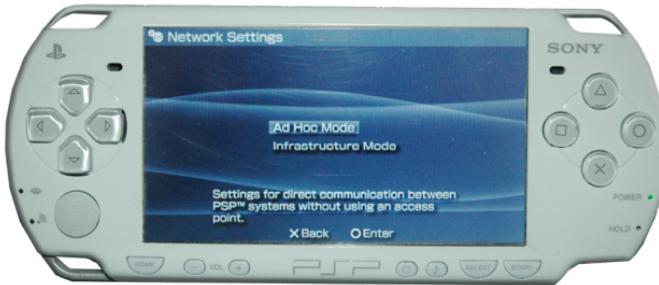
1. Topology of PSP™ connecting with LYNX 150
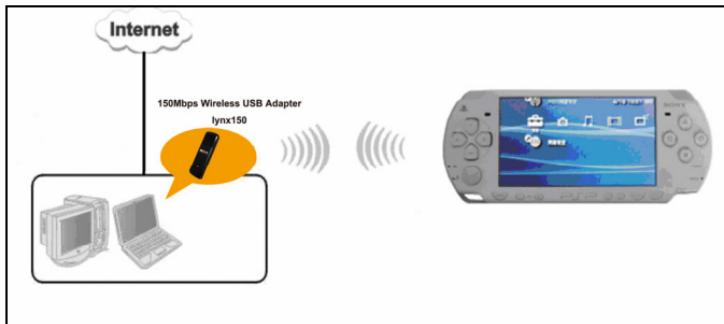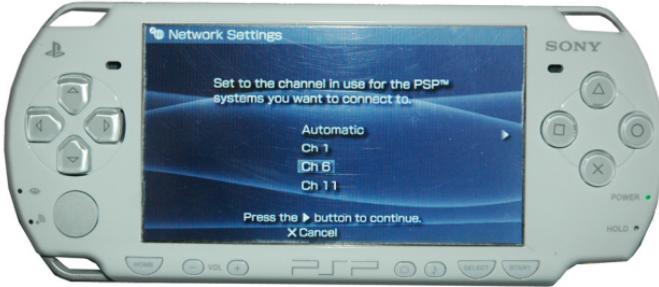

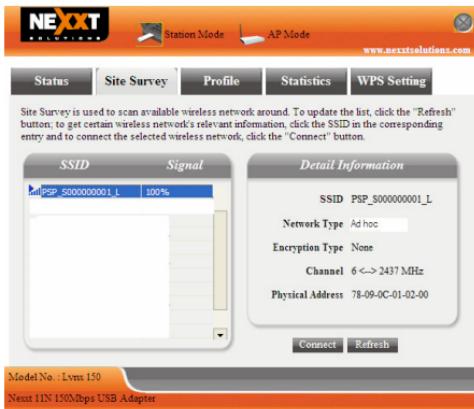## 2. To configure PSP™ with Ad-Hoc mode

Select Network Settings

Select Ad-Hoc mode

2.3 Select Channel

5. To configure Xlink Kai

Select "Start"→ "All programmers" → "Xlink Kai Evolution VII" → "Start Kai Config" to configure the user name, password and other parameters as follows.
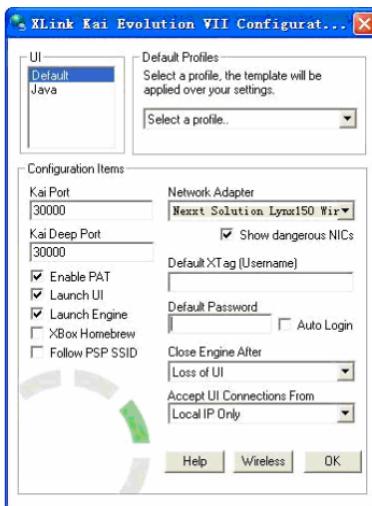
6. Login Xlink Kai

Select "Start"→ "All programs" → "Xlink Kai Evolution VII" → "Start Kai". PSP™ will connect with Xlink Kai automatically. The following window will indicate the connection is established well now.