

Tenda[®]

W322P+ 300Mbps Wireless PCI Adapter

User Guide

www.tenda.cn



Copyright Statement

Tenda is the registered trademark of Shenzhen Tenda Technology Co., Ltd. All the products and product names mentioned herein are the trademarks or registered trademarks of their respective holders. Copyright of the whole product as integration, including its accessories and software, belongs to Shenzhen Tenda Technology Co., Ltd. Without the permission of Shenzhen Tenda Technology Co., Ltd, any individual or party is not allowed to copy, plagiarize, imitate or translate it into other languages.

All the photos and product specifications mentioned in this guide are for references only. As the upgrade of software and hardware, there will be changes. And if there are changes, Tenda is not responsible for informing in advance. If you want to know more about our product information, please visit our website at www.tenda.cn.

Table of Content

Chapter 1 Introduction	1
1.1 Product Feature	2
1.2 Product Deployment	3
1.3 Indicator Description	4
1.4 Package Contents.....	4
Chapter 2 Installation Guide.....	5
Chapter 3 Client Utility Interface.....	10
3.1 Station Mode	11
3.1.1 Station Mode Topology	11
3.1.2 Status	12
3.1.3 Site Survey	13
3.1.4 Profile Management	14
3.1.5 Statistics.....	16
3.1.6 WPS Setting	16
3.2 AP Mode	18
3.2.1 AP Mode Topology	18
3.2.2 Basic Setting	19
3.2.3 Security Setting	20
3.2.4 Access Control	21
3.2.5 About	23
Appendix One: Acronyms and Terms	24
Appendix Two: Product Specification.....	27
Appendix Three: How to connect with PSP.....	28

Chapter 1 Introduction

W322P/P+ V2.0 is a Wireless PCI Adapter with up to 300Mbps transmitting rate. It adopts the very latest wireless standard—IEEE802.11n, which perfectly complies downward with IEEE802.11g/b standards, efficiently reduces the “dead spots” in wireless area and widely multiplies the wireless coverage area.

W322P/P+ V2.0 is suitable for desktop computer. Its transmitting rate can reach up to 300Mbps when connected to Tenda W306R 11N Wireless Router. The high speed of wireless networking makes it ideal for on-line applications like surfing, streaming video, gaming, downloading and Voice over IP telephone, and gives you much headroom to run movies and photos in LAN.

In a word, W322P/P+ V2.0 is a 300Mbps Wireless PCI Adapter with robust signal, farther transmitting distance and stable performance.

 **Note:**

The only difference between W322P V2.0 and W322P+ V2.0 is that W322P+ V2.0's antenna can be detachable.

1.1 Product Feature

- Supports 300Mbps wireless receiving and transmitting rate
- Complies with the latest 802.11n and 802.11b/g standards
- Supports 32-bit PCI port
- Supports 20MHz/40MHz frequency width
- Detects wireless network and changes transmitting rate automatically
- Provides two working modes: Infrastructure and Ad-Hoc
- Supports 64/128-bit WEP and WPA/WPA2 encryption methods
- Supports WPS encryption method to free you from memorizing long passwords

- Complies with Windows Vista/XP/2000, Linux, MAC OS, etc.
- Supports WMM to smooth your audio and video
- Supports PSP, NDS and Wii connection with Internet and Xlink Kai to enjoy on-line gaming
- Supports Soft AP to establish your wireless LAN networking quickly

1.2 Product Deployment

W322P/P+ V2.0 Wireless PCI Adapter offers fast, reliable and cost- effective solution for wireless access. Deployment as follows;

- For staff who requires higher mobility in the office, they want to have access to traditional wired or wireless network in any place of the company;
- Enterprise or individual who requires often changes in lay out of network cables;
- Companies or places which are not suitable for

LAN cable laying out because of budget or objective building, including places of great interests, rent places or places for short-term usage;

- Company or individual who avoids using expensive cables, renting cables or renting rights for access.

1.3 Indicator Description

In the front panel of W322P/P+ V2.0, 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:

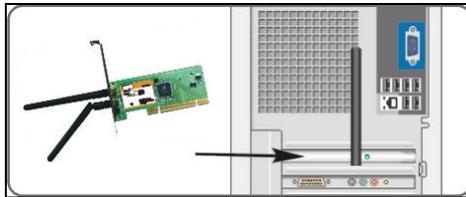
- One W322P/P+ V2.0 Wireless PCI Adapter
- One CD-ROM

Chapter 2 Installation Guide

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

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

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



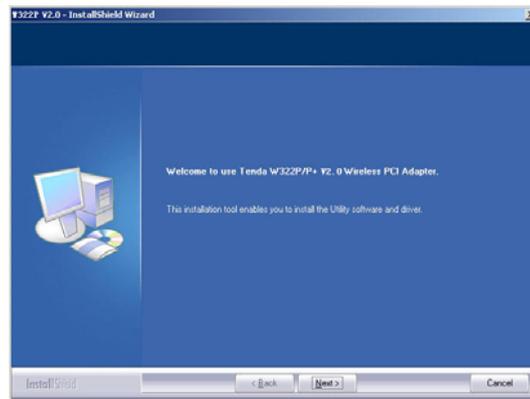
2. "Found New Hardware" system dialogue appears, and selects "Cancel" to use the included Setup Wizard for fast installation; of course, you also can select "Next" to install by manual.



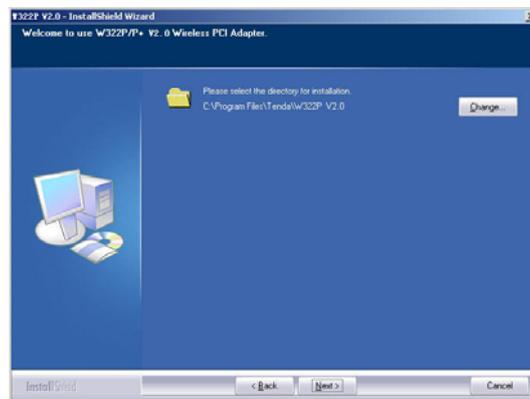
3. Insert the included CD-ROM into the CD-ROM drive of your computer, and the Welcome screen appears. (If not appear, double click the "Setup" icon.)



4. Click "Enter".



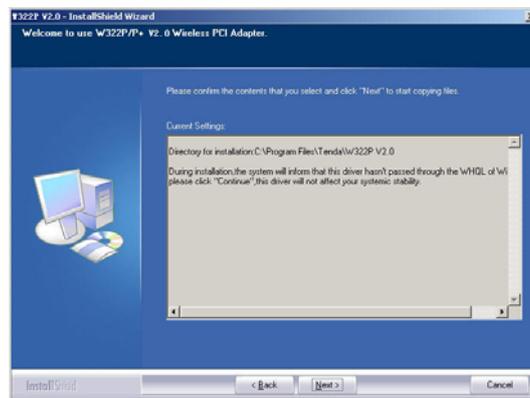
5. Click "Next" to start installing.



- Click "Change..." to select the directory path, or click "Next".



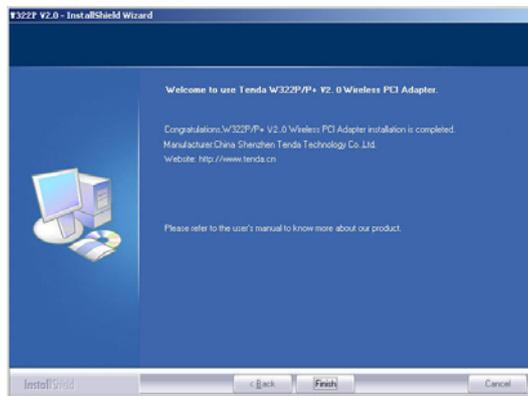
- Select "OK" and "Next" in the following window.



8. During the installation, the following dialogue maybe appears. 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 W322P/P+ V2.0 Wireless PCI Adapter management. If it does not appear, select "Start"—"All Programs"—"Tenda"—"W322P V2.0", or click the shortcut on your PC's desktop.

 **Note:**

In the Windows XP, you can select the included W322P/P+ V2.0 Client Utility Interface or the Windows XP internal wireless application to configure the device.

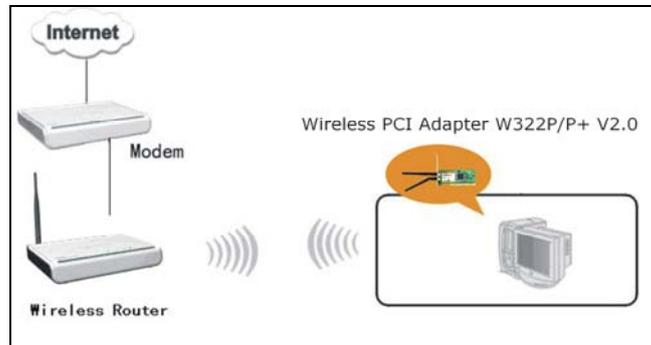
There are two client utility applications in W322P/P+ V2.0: Station mode and AP mode.

 **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, W322P/P+ V2.0 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 is used to fast connect the wireless network you need.



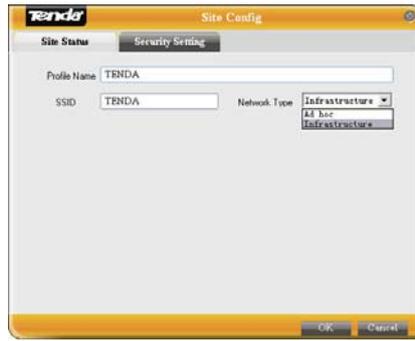
UP/DOWN: To change the profile's sequence in the list.

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 Setting

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.

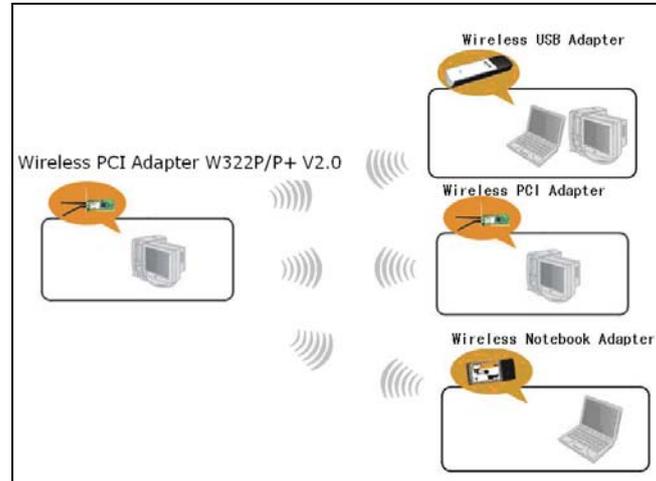
Rescan: to rescan the WPS-compliant wireless network around.

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 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 Setting

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 made take effect.

3.2.3 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.

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 made take effect.

3.2.5 About

This window displays something 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. 802.11g 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

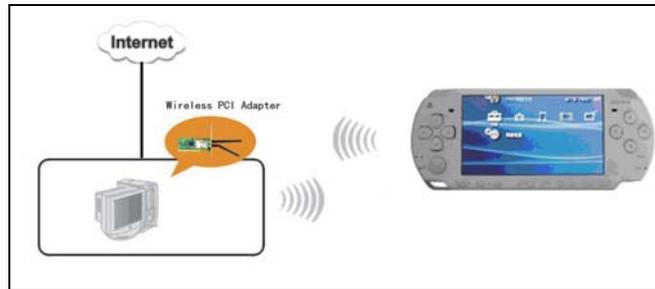
- WEP** Wired Equivalent Privacy. A security protocol for WLANs defined in the IEEE 802.11 standard.
- WPA** Wi-Fi Protected Access
- WPA2** Wi-Fi Protected Access 2. The next generation of Wi-Fi security, based on the 802.11i standard.
- WPA2-PSK** Wi-Fi Protected Access 2-Pre-shared Keys
- WPA-PSK** Wi-Fi Protected Access-Pre-shared Keys

Appendix Two: Product Specification

Standard	IEEE802.11g, IEEE802.11b, IEEE802.11n
Port	32-bit PCI 2.2 interface
Frequency Range	2.4~2.4835GHz
Antenna Gain	2T2R 2.2dBi antenna* 2
Transmission Power	Max. 19dbm
Modulation Method	OFDM, CCK
Working Temper.	0°C~40°C
Storage Temper.	-40°C~70°C
Working Humidity	10%~90%RH non-condensing

Appendix Three: How to connect with PSP

1. Topology of PSP connecting with W322P/P+ V2.0



2. To configure PSP with Ad-Hoc mode

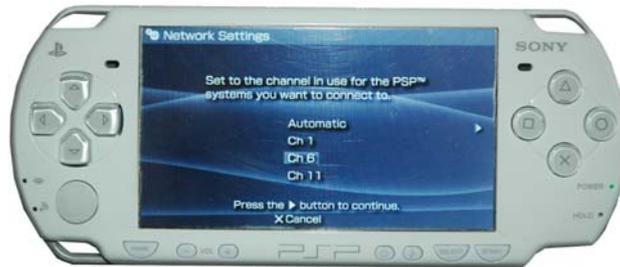
2.1 Select Network Settings



2.2 Select Ad-Hoc mode



2.3 Select Channel



3. In W322P/P+ V2.0 Utility Interface scan PSP and double-click to connect the wireless network.

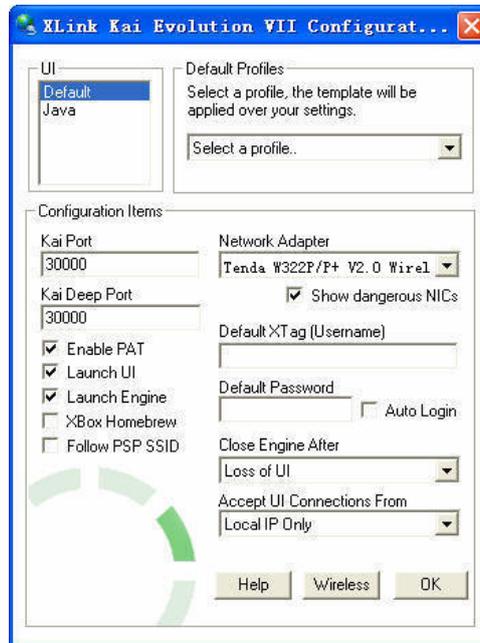


4. In Site Survey check "enable PSP connection mode" box.



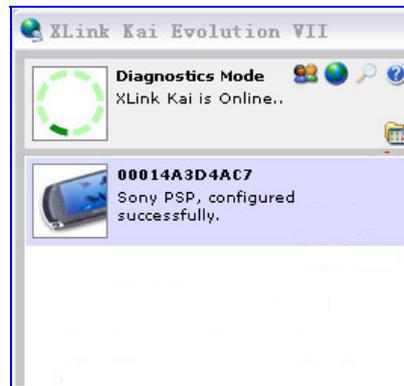
5. To configure Xlink Kai

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



FCC Radiation Exposure Statement

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with the minimum distance of 20 cm.

This device complies with Part 15 of FCC, 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.

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

Caution!

The manufacturer is not responsible for any radio or TV interference caused by unauthorized modifications to this equipment. Such modifications could void the user authority to operate the equipment.