ZyXEL NWD-490

802.11 b/g Wireless SDIO Adapter

User's Manual

Version 1.0
January 2007

ZyXEL
Unleash Networking Power

Important Note

Federal Communication Commission Interference 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 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.

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

IMPORTANT NOTE:

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 minimum distance 20cm between the radiator & your body.

1. Introduction

Take advantage of the Wi-Fi connection when you on the go. The NWD-490 SDIO 802.11g wireless client adapter provides high-speed wireless connection to your PDA or Smart phone. If your pocket PC does not have the built-in Wi-Fi function, or the built-in 802.11b wireless module keeps you waiting when you need to get e-mail attachment, then the NWD-490 with 54 Mbps data rate is the solution for you.

1.1 Minimum System Requirements

- PDA or Smart phone equipped with SDIO slot.
- The supported OS are PC 2003, Mobile 4.2/5.0

1.2 Installation Overview

1. Install SDIO driver via **Active Sync®** to the PDA or Smart Phone.
2. Insert the NWD-490 SDIO Wireless Adapter.
3. Select **ZyXEL SDIO Wireless Adapter** as Network adapter in PDA.
4. Configure wireless security settings if needed.

2. Software Installation

>) **Do not insert ZyXEL NWD-490 into the SDIO slot of your PDA until the Driver installation has been performed.**

1. Connect your PDA to your computer and make sure Active-Sync® has established a connection between the two devices.

2. Insert the support CD into the CD-ROM drive on your computer.

3. Click **Setup** to install the NWD-490 driver. If this screen does not display, locate and double-click **autorun.exe** on the support CD.

4. When complete the driver installation, the screen of **ZyXEL 802.11g SDIO Wireless Adapter.CAB was successfully installed on your device** displays.

3. Getting Started

The installation screen shots are based on Mobile 5.0 unless otherwise specified. To ensure ZyXEL NWD-490 works well in your PDA or Smart phone, we recommend you process the following steps for setting.

1. Insert the ZyXEL SDIO Card into the SD slot of your PDA. The LED turns on and blinks if the NWD-490 is installed properly.

2. Tab on **Start** menu **-> Settings**.

3. Tap on the **Connections** tab.
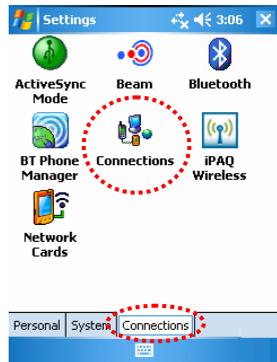
4. Tap on **Set up my proxy server** on the **Connection** page.

5. On the **Proxy Settings** page, make sure the checkbox of **This network connects to the Internet** is checked, the checkbox of **This network uses a proxy server to connect to the Internet** should *not* be checked and the **Proxy server** box should remain blank.

    Tap on **ok.**
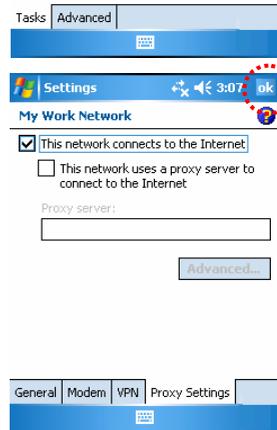
☞ **If your device has built-in 802.11b wireless, in order to improve wireless performance, you may disable the existing IEEE 802.11b signal.**

6. Return to **Settings** page **-> Connections** tab **->** tap on the built-in wireless connection (In this case, it is **iPAQ Wireless)**.

7. Turn off the IEEE 802.11b function and tap **ok**.

   * In this example, tap on **Wi-Fi** icon on the **iPAQ Wireless** page. When a red dot with a white x appears, the built-in IEEE 802.11b has been turned off.

8. On **Settings** page **-> Connections** tab **->** tap on the **Network Cards** icon.

9. Tab on **Network Adapters** tab, and select the **ZyXEL SDIO Wireless Adapter.**
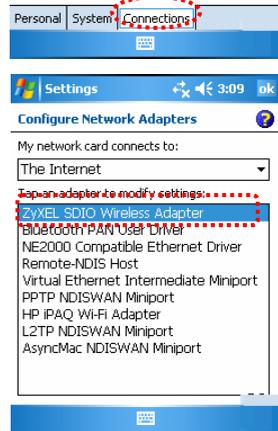
10. If you are connecting to a network that has a DHCP server, select **Use server-assigned IP address** to have the DHCP server assign TCP/IP information (such as IP address and Subnet mask) to your NWD-490, otherwise, select **Use specific IP address** and fill in the **IP address, Subnet mask** and **Default gateway**. Then tap on **ok**.

4. Configuring WLAN Utility

To connect to a wireless network, you must set the client device (PDA) with the SSID as the Access Point (AP) or Router you want to connect to. You also need to configure the security settings if the AP or Router already has one.

The NWD-490 supports WEP, WPA-PSK and WPA2-PSK for wireless network security.

1. Tap on **Start -> Settings** page **-> Connections** tab **-> Network Cards** icon.

2. Select the SSID you want to connect to from the list of wireless networks found.
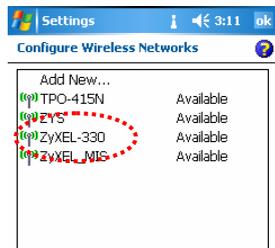
3. If wireless security was enabled in the network you selected, enter the appropriate Network key (case-sensitive) to match the AP or Router. Then tap on **ok**.

   *Unless you know your router is designed for and set up for IEEE 802.1x network access, you should leave the box unchecked on **802.1x** page.*

5. Troubleshooting

1.	The driver was not installed, or installed incorrectly.

- Make sure your PDA or Smart phone's operating system is either PC 2003 or Mobile 4.2/5.0.

- If you found a previous installed drive exists, create an active connection and uninstall the existing driver in ActiveSync then re-run the software installation.

2.	The LED does not behave as expected.

- Remove and reinsert the SDIO adapter.

- Check the hardware connection to see if it works properly.

3.	Cannot get IP address from the server.

- Contact your network administrator.

- Remove and reinsert the SDIO adapter and soft reset your PDA or Smart phone.

4.	Cannot connect to the network.

- Check and re-enter the SSID and the Network key.

- Check with your IT manager to confirm the security settings.

If the problems persist, there may be a hardware problem. In this case, please contact ZyXEL customer support.

6. Customer Support

Please have the following information ready when you contact customer support.

- Product model and Serial number
- Warranty Information
- Date that you received or purchased your device
- Brief description of the problem including any steps that you have taken before contacting the ZyXEL Customer Support Representative

SUPPORT E-MAIL	TELEPHONE	WEB SITE
support@zyxel.com	+1-800-978-7222	www.zyxel.com