2.4GHz Wireless LAN Card

User's Manual

XI-330B

Version 2.00.02

11Mbps Wireless LAN Card
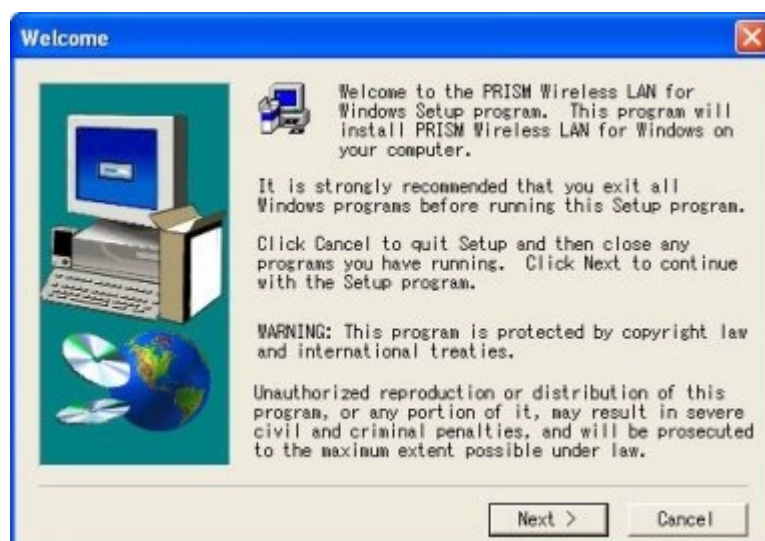
Quick Start Guide
Version 2.00.02

Ⅰ. **Installation of the PRISM Wireless LAN Utility under Windows XP**
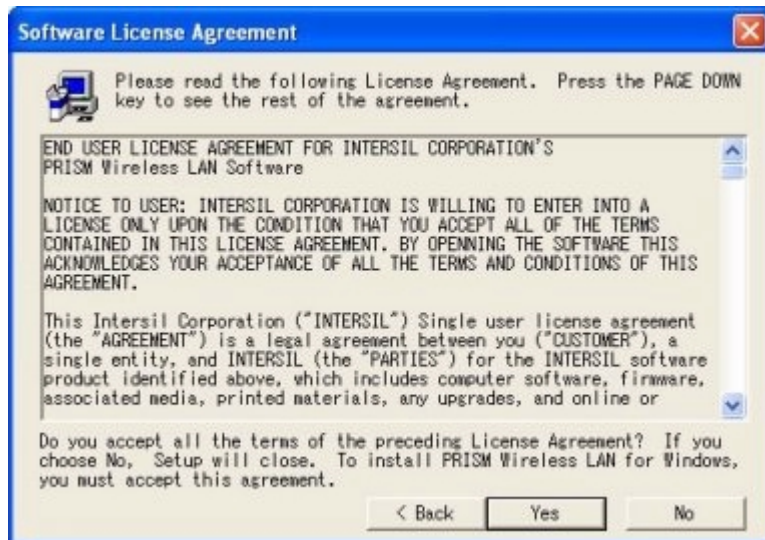
1. Insert the Product CD-ROM into the appropriate drive. Click **setup.exe**. The following screen will show up. Click **Continue** to continue.

2. Follow the on-screen instructions to install the Wireless LAN Utility. The next screen will indicate that Windows start and continue the installation. Click **Next**.

3. The next screen shows the **Software License Agreement**. Please read the entire agreement by pressing the Page Down key or by using the on-screen scroll bar. Click **Yes** to continue if you agree or **No** if you disagree.

4. The following screen will show **Setup Complet**e Windows. Click **Finish**.

5. Upon completion, go to **Program Files** and run the PRISM Wireless LAN Configuration. The utility interface will then appear and at the same time its icon appears in the **System Tray** in the bottom right corner of your task bar.

Ⅱ. Installation of the PRISM Wireless LAN Driver under Windows XP

1. Insert the Wireless LAN Card into the PCMCIA slot on your notebook and start Windows. Windows will auto-detect the Wireless LAN Card and a "**Found New Hardware Wizard**" window will show up.

2. Select "**Install the software automatically (Recommended)**" and insert the Product CD-ROM into the appropriate drive. Click on **Next** to install the driver.

3. The windows will find "**Wireless LAN Card**". Click on **Next** to continue.

4. The Windows XP compatibility screen will show up. Please click **Continue Anyway** button to continue.

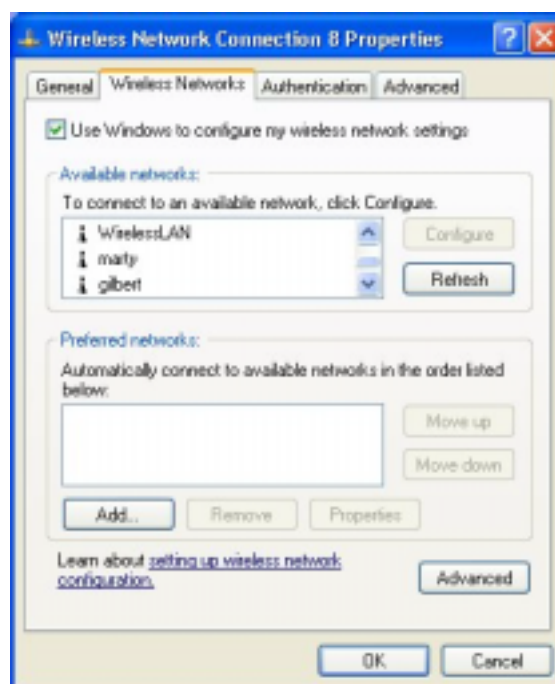5. Click **Finish** to complete the installation.

After installing the Wireless LAN Card, the Windows XP will display a "Wireless Network Connection # " message.

Click on the message and the XP Connect to Wireless Network dialog box will appear. Click on an available wireless infrastructure network (Access Point), as seen in the Connect to Wireless Network dialog box.

You may click the **Advanced** button to perform advanced configuration.

For more information on using the XP Wireless Network Configuration utility please refer to

Windows XP **Help** pages.

However, the Wireless LAN Utility, which came with the Wireless LAN Card, provides you more tools to configure the Wireless LAN Card and to monitor the wireless connection. For more information on using the Wireless LAN Utility, please refer to the following sections "*Usage of the Wireless LAN Utility*".

> ✎ **Note:** To use the Wireless LAN Utility under Windows XP, you need to disable the *Wireless Network Configuration* first. Steps are described as follows:
> - Right click the **Network Connections** icon. Select **Properties**.
> - Go to the **Wireless Networks** tab.
> - Uncheck the "**Use Windows to configure my wireless network settings**" check box and click the **OK** button (see the above picture).

Installation of the PRISM Wireless LAN Card under Windows 2000

1. Insert the Wireless LAN Card into the PCMCIA slot on your notebook and start Windows. Windows will auto-detect the Wireless LAN Card and a "**Found New Hardware Wizard**" window will show up. Click **Next** to proceed.
2. Select "**Search for a suitable driver for my device (recommended)**". Insert the Product CD-ROM into the appropriate drive. Click on **Next** to install the driver.
3. The windows will find "**Wireless LAN Card**". Click on **Next** to continue.
4. Click **Finish** to complete the installation.

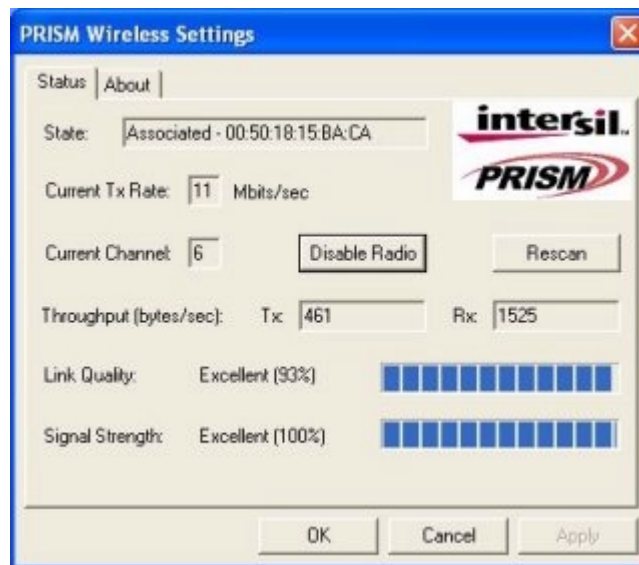### Installation of the PRISM Wireless LAN Card under Windows 98SE

1. Insert the Wireless LAN Card into the PCMCIA slot on your notebook and start Windows. Windows will auto-detect new hardware and will display an "**Add New Hardware Wizard**" window.
2. Select "**Search for the best driver for your device (recommended)**". Insert the Product CD-ROM into the appropriate drive. Click on **Next** to install the driver.
3. The Windows will find "**Wireless LAN PC Card**". Click on **Next** to continue.
4. Once the [Please insert the disk labeled "Windows 98/ME CD-ROM", and then click OK] window appears, enter the path corresponding to the appropriate drives and click **OK**. Usually these files can be found at C:Windows or C:Windows\system.
5. Click **Finish** to complete the installation. Restart Windows.

Ⅲ. Usage of the Wireless LAN Utility

The Wireless LAN Utility consists of window with 4 items for you to monitor and configure the Wireless LAN Card: **Status**, **Configuration**, **Encryption** and **About**.
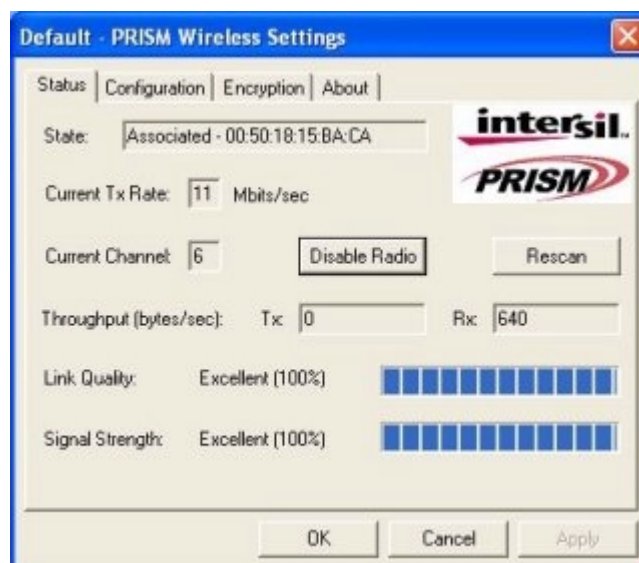
NOTE: Under Windows XP with the Wireless Zero Configuration service enabled,

configuration and encryption are controlled by the operating system. When you start the Configuration Utility with this service enabled, only the **Status** and **About** tabs appear, as shown in the following illustration.
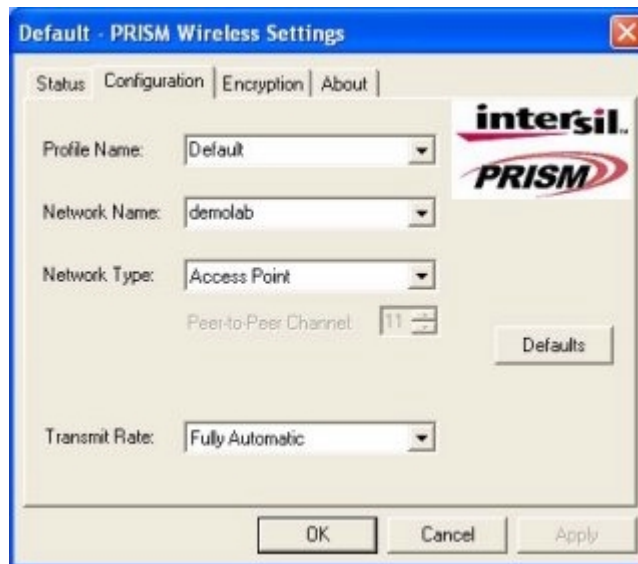

Status:

In **Status** tab, you may monitor the basic information and current status of Wireless LAN Card such as **Status, Current Tx Rate**, **Current Channel**, **Throughput**, **Link Quality** and **Signal Strength.**

You can click the *Disable Radio* button to turn off the wireless radio. Click this button again to turn the radio back on. You can click the *Rescan* button to force the radio to rescan all available channels. If your link quality or signal strength is poor, rescanning can be used to push the radio off a weak Access Point and search for a better link with another Access Point.

Configuration:

In Configuration tab, you may specify the operating parameters for your Wireless LAN Interface.

The Profile field allows you to set values for all parameters by selecting a previously defined profile. To create a profile, go to the Profile field, type in a **Profile Name.** Click the **Apply** button to put it into effect. You can have multiple profiles and modify a profile at any time. The Defaults button contains the parameters configured at installation.
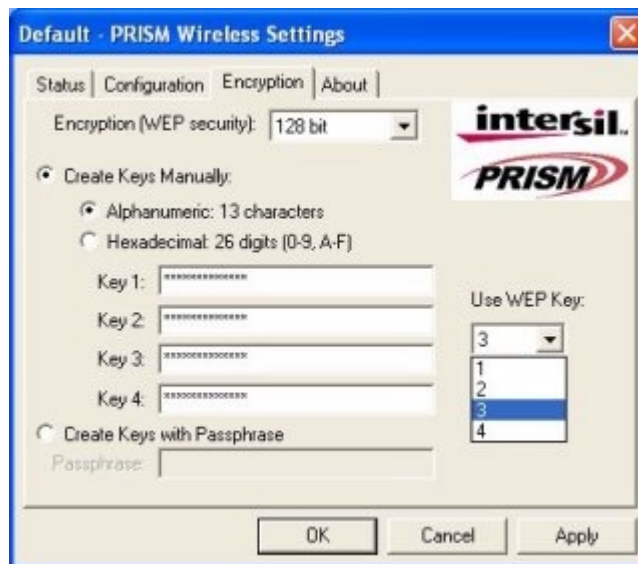
In wireless networks the network name is known as the SSID (Service Set IDentifier), and is used by Access Points and stations to identify a wireless LAN. You can scan the available channels looking for an Access Point or another station which has specified this same SSID. It then attempts to associate with these Access Points or stations to form a wireless LAN. To change the SSID, simply highlight it, type the new SSID. Click the *Apply* button to put it into effect.

Network Type: Configurable between 802.11 Ad-hoc (Peer-to-Peer) and Infrastructure (Access Point) modes. In 802.11 Ad-hoc mode, the wireless nodes form their own local network where the end nodes communicate peer-to-peer without an access point. In Infrastructure mode, the wireless searches all available wireless channels to associate with an access point. Peer-to-Peer Channel only valid in Peer-to-Peer mode, this indicates the wireless channel currently in use.

The Transmit Rate field specifies the data transfer rate between the wireless node and the device it is communicating with.

Encryption:
To prevent unauthorized wireless stations from accessing data transmitted over the network, the Wireless LAN Card offers highly secure data encryption, known as WEP (Wired Equivalent Privacy). The Encryption tab allows you enable encryption and set the encryption keys.

From the WEP encryption item, pull down the menu and it will list three options:

Disable – Allows wireless adapters communicate with Access Points without any data encryption.

64 Bit – Requires wireless stations to use data encryption with 64 Bit algorithm when communicating with the Access Point.

128 Bit – Allows wireless clients to communicate with the Access Point with 128 Bit encryption algorithm.

The **Encryption** tab enables you to identify up to 4 different encryption keys and select one of them to encrypt your transmission data.   The key value of your choice may either be:

For 64-bit encryption:
- 5 characters alphanumeric or 10 digit hexadecimal values in the range of "A-F" and "0-9" (e.g. 11AA22BB33).

For 128-bit encryption:
- 13 characters alphanumeric or 26 digit hexadecimal values in the range of "A-F" and "0-9" (e.g. 11AA22BB33123456789ABCDEFF)

You don't need to enter all four keys because WEP will only use one key.   Please go to "**Use WEP key** " and select one key as an active key to encrypt wireless data. After entering all the fields described above and then click the **Apply** button to make the encryption take effect.

Create Keys with Passphrase
To create encryption keys using a passphrase, click the radio button next to *Create Key with Passphrase* and type a character string in the Passphrase field. As you type, the Configuration Utility displays asterisks to mask your passphrase and uses an algorithm to generate four keys used for encryption.

About:

The **About** tab shows information on the version of the Network driver, Configuration Utility, and NIC firmware of the Wireless LAN Card.

FCC Information

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.

Federal Communications Commission (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.

Warning: Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user authority to operate the equipment.
Tested to comply with FCC standard. FOR HOME OR OFFICE USE.

FCC RF Radiation Exposure Statement:

1. This Transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

2. This equipment complies with FCC RF radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 2.5 centimeters between the radiator and your body.

Specification

Description: 2.4GHz ISM Band Direct Sequence Spread Spectrum (DSSS) 802.11b 11Mbps wireless LAN PC card

Interoperability: Interoperable with Wi-Fi(WECA) certified products(AP, card etc.)

Host Interface :   16-bit PCMCIA V2.1 I/O interface, type II, 3.3V/5V key

Support OS: Windows 95/98/2000/NT/ME/CE3.0, Linux

Network Architecture Types:

Supports ad-hoc (peer-to-peer) and infrastructure (communications to wired networks via Access Points), roaming (standard IEEE 802.11b compliant)

Operating Channels: 11 for N. America, 14 Japan, 13 Europe (ETSI), 2 Spain, 4 France

Operating Frequency: 2.412-2.462 GHz(N. America)

2.412-2.484 GHz(Japan)

2.412-2.472 GHz(Europe ETSI)

2.457-2.462 GHz(Spain)

2.457-2.472 GHz(France)

Modulation: CCK (11Mbps, 5.5Mbps), DQPSK (2Mbps), DBPSK (1Mbps)

Chipset :   PRISM III chipset on-board

Data Rate: 11, 5.5, 2, 1Mbps, Auto Rate

Memory Size: 128Kx16 SRAM, 1Kx8 EEPROM Serial

LED: Link status, Power-on

Coverage: 11Mbps : 120m(In open environment)

5.5Mbps : 170m(In open environment)

2Mbps : 270m(In open environment)

1Mbps : 400m(In open environment)

Power Consumption: TX power consumption <350mA

RX power consumption <280mA

Sleep Mode power consumption (TBD)

RF Output Power: Channels 1~13 : 14dBm±3dB

Channel 14   : 12dBm±3dB

Sensitivity: @PER< 8%

11Mbps   :   <-80 dBm

5.5Mbps   :   <-83 dBm

2 Mbps   :   <-86 dBm

1 Mbps   :   <-89 dBm

Warranty: One Year Limited Warranty

Environmental Info

Operating Temperature:	0 ~ 55 ℃
Storage Temperature:	-20 ~ 80 ℃
Humidity (non-condensing):	5~80%
Size and Weight:	PCMCIA type II card
	L11.3mm* W54.0mm* H5.0mm
	Compact Size Weight < 50 g

Service Centre:

COMPANY NAME: ZCOMAX TECHNOLOGIES, INC.

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TEL: (562) 926-4588