

**X-Micro Technology Corp.**

**User Guide**  
*for*  
**X-Micro WLAN Solution**  
IEEE 802.11b/g Wireless Network Adapter



# Preface

This user's guide provides the necessary information for first-time users to successfully install the X-Micro network driver interface specification (NDIS) driver, for the purpose of evaluating and/or operating the X-Micro WLAN card solution for IEEE 802.11b/g in a Microsoft Windows environment and the X-Micro WLAN Driver and Utility. This guide also provides information for users who wish to upgrade the X-Micro NDIS driver from previous releases. This guide describes the steps required to install NDIS drivers for the X-Micro Wireless Network Adapter in Windows 2000, Windows XP, Windows Millennium Edition, Windows 98SE.

## About this Document

Chapter 1 Introduction—Hardware, software, and system requirements needed to set up the X-Micro Wireless Network Adapter.

Chapter 2 Installation—Installation/uninstallation procedures for Windows XP, Windows 2000, Windows ME, Windows 98SE.

## Warning

802.11b Restrictions:

- European standards dictate maximum radiated transmit power of 100mW EIRP and frequency range 2.400~2.4835GHz.
- In France, the equipment must be restricted to the 2.4465~2.4835GHz frequency range and must be restricted to indoor use.

# 1 Introduction

The X-Micro Wireless Network Adapters are designs based on the Inprocomm IPN2220 and Maxim 2825 chip set. These designs implement a half-duplex, Orthogonal Frequency Division Multiplexing (OFDM) baseband processor supporting all IEEE 802.11g data rates (6 to 54 Mbps) and 802.11b data rates (1 to 11 Mbps). The host interface is compatible with the PC Card 7.1 and PCI 2.3 standards.

## **System Requirements**

Laptop PC containing:

- 32-bit CardBus slot (or Desktop PC with PC Card-PCI adapter)
- 32 MB memory or greater
- 300 MHz processor or higher

Microsoft Windows 2000/Windows Millennium Edition/Windows 98 Second Edition/Windows XP

# 2

# Installation

This chapter describes using the X-Micro installer to install the X-Micro WLAN Driver and Utility. X-Micro provides an InstallShield utility to upgrade the NDIS driver, if a previous release is installed, and to install the X-Micro WLAN Driver and Utility.

- Use the X-Micro WLAN Driver and Utility to configure the device driver.
- Use the InstallShield Updater to uninstall the NDIS driver and X-Micro WLAN Driver and Utility application and remove them from the Device Manager.

## **X-Micro WLAN Driver and Utility Installation and Driver Update**

This section describes installing the client utility and driver on the Windows XP, Windows 2000, Windows ME, and Windows 98SE OSs.

### **To install the X-Micro WLAN Driver and Utility:**

1. Copy the driver package (ex: setup.exe) to any directory of Notebook or PC. It can be run on the Windows XP, Windows 2000, Windows ME, and Windows 98SE OSs.
2. Click the package “setup.exe” to appear the installation dialog.
3. Click the “Next” icon to continue the installation. If no previous installation exists, the dialog will appear.
4. Click “I accept the terms in the license agreement” shown as in Figure 1. If previous installation is found as shown in Figure 2, chose the desire option from “Modify, Repair”, and “Remove”.

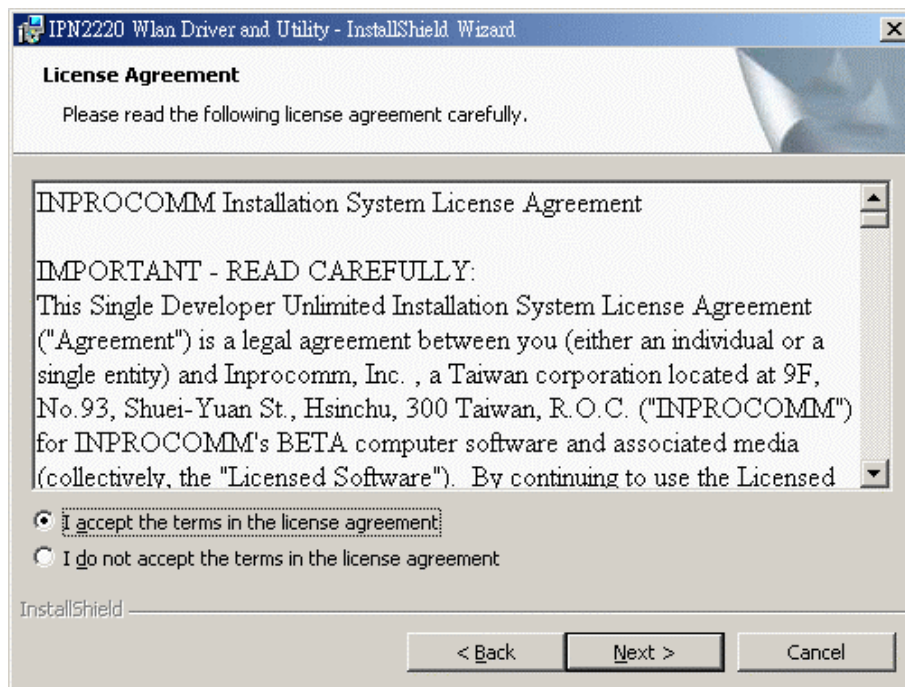


Figure 1. License Agreement Dialog

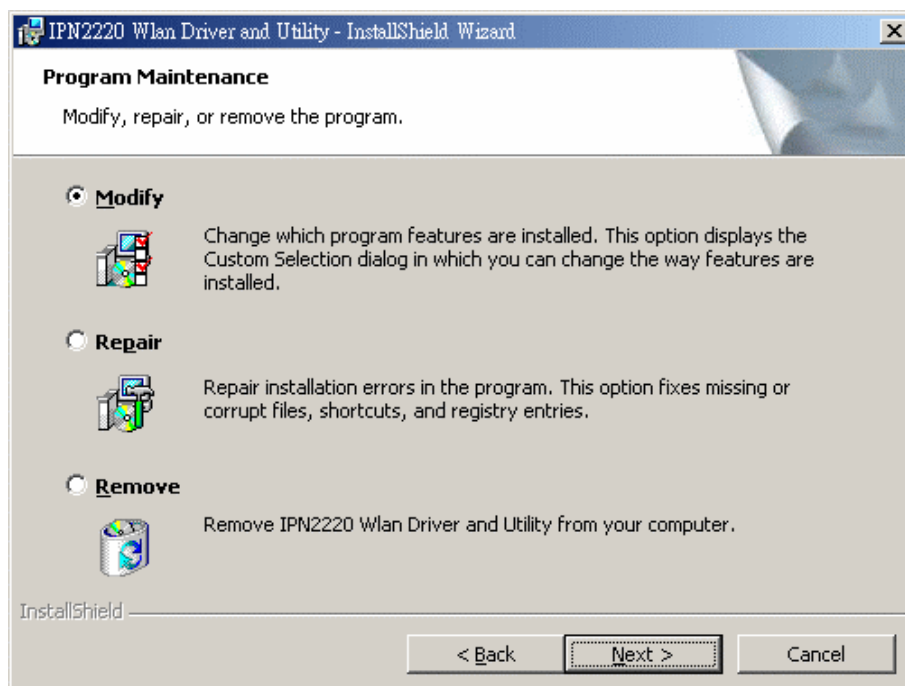


Figure 2. Modify, Repair, and Remove Option Dialog

5. Click “Install” to install the program.

6. Click the “Continue Anyway” to complete the installation of “X-Micro WLAN Driver and Utility”.

## Driver Installation

---

This section describes the installation for the Windows driver on the Windows XP, Windows 2000, Windows ME, and Windows 98SE OSs.

### To install the driver:

1. Insert the X-Micro Wireless Network Adapter into a 32-bit CardBus slot.
2. Wait for the “Found New Hardware Wizard” dialog box to appear as Figure 3. Choose the recommended method to “Install the software automatically,” and click “Next” to continue.



Figure 3. Windows Found New Hardware Dialogue

3. The X-Micro NDIS evaluation driver currently does not have a digital signature from Microsoft. Therefore, Windows may show a warning message shown as Figure 4. Click “Continue Anyway” to proceed with driver installation.
4. If the “Found New Hardware Wizard” dialog box doesn’t appear, run the “Add/Remove Hardware” in the “Control Panel”. Click the option to install the driver manually by browsing the created directory and selecting the “IPN2220.inf”.



Figure 4. Windows Digital Signature Warning

5. Click “Finish” to complete driver installation.

#### Federal Communication Commission Interference Statement

### Federal Communications Commission (FCC) Requirements, Part 15

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:

1. Reorient or relocate the receiving antenna.
2. Increase the separation between the equipment and receiver.
3. Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
4. 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.

FCC Caution:

FCC RF Exposure Statement:

This equipment complies with FCC RF radiation exposure limits set forth for an uncontrolled environment. This device and its antenna must not be co-located or operating in conjunction with any other antenna or transmitter.

Use only with supplied antenna. Unauthorized antenna, modification, or attachments could damage the transmitter and may violate FCC regulations.

## Regulatory information / Disclaimers

Installation and use of this Wireless LAN device must be in strict accordance with the instructions included in the user documentation provided with the product. Any changes or modifications (including the antennas) made to this device that are not expressly approved by the manufacturer may void the user's authority to operate the equipment. The manufacturer is not responsible for any radio or television interference caused by unauthorized modification of this device, or the substitution of the connecting cables and equipment other than manufacturer specified. It is the responsibility of the user to correct any interference caused by such unauthorized modification, substitution or attachment. Manufacturer and its authorized resellers or distributors will assume no liability for any damage or violation of government regulations arising from failing to comply with these guidelines.

CE Warning:

Regulatory statement ( R&TTE / WLAN IEEE 802.11 b/g )

European Standards dictate maximum radiated transmit power of 100mW EIRP and frequency range 2.400-2.4835GHz; In France, the equipment must be restricted to the 2.4465-2.4835GHz frequency range and must be restricted to indoor use.

CE Declaration of Conformity:

For the following equipment: Wireless LAN Card Bus

**CE0984①**

Is herewith confirmed to comply with the requirements set out in the Council Directive on the Approximation of the Laws of the Member States relating to Electromagnetic Compatibility (89/336/EEC),

Is herewith confirmed to comply with the requirements set out in the Council Directive on the Approximation of the Laws of the Member States relating to Electromagnetic Compatibility (89/336/EEC), Low-voltage Directive (73/23/EEC) and the Amendment Directive (93/68/EEC), the procedures given in European Council Directive 99/5/EC and 89/3360EEC. The equipment was passed. The test was performed according to the following European standards:

- EN 300 328-2 V1.2.1 (2001-08)
- EN 301 489-1 V.1.4.1 (2002-04) / EN 301 489-17 V.1.2.1 (2002-04)
- EN 50371: 2002
- EN 60950: 2000