

IEEE 802.11b Wireless LAN USB Card

User's Guide

Version: 1.0 (USB-300) — May 2002

Copyright Statement

No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, whether electronic, mechanical, photocopying, recording or otherwise without the prior writing of the publisher.

Windows[™] 98SE/2000/ME/XP/CE are trademarks of Microsoft[®] Corp.

Pentium is trademark of Intel.

All copyright reserved.

Notes:

The Product is passed CE and able to be used in these countries as following:

North America: US, Canada

Europe: Germany, France, Italy, England, Spain, Austria, Danish, Finland, Iceland, Luxembourg, Netherlands, Norway, Sweden, Switzerland

Asia: Hongkong, Taiwan, Korea, Singapore

Australia, New Zealand



Radio Channel Selection Table

	Regulatory domains				
Channel_ID	U.S.A.	Canada	Most of Europe	France	Japan
1	X	X	X	—	X
2	X	X	X	—	X
3	X	X	X	—	X
4	X	X	X	—	X
5	X	X	X	—	X
6	X	X	X	—	X
7	X	X	X	—	X
8	X	X	X	—	X
9	X	X	X	—	X
10	X	X	X	X	X
11	X	X	X	X	X
12	—	—	X	X	X
13	—	—	X	X	X
14	—	—	—	—	X

X = Yes

— = No

Regulatory Information

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.

FCC Caution: To assure continued compliance, (example - use only shielded interface cables when connecting to computer or peripheral devices) any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

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.

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.

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

Table of Contents

Regulatory Information	4
1. Welcome	6
1.1 Kit Contents.....	7
1.2 Main Features of WLAN USB Card	8
1.3 Wireless Networking Scenarios	9
1.4 Advantages for Using Wireless Network.....	11
2. Quick Start to Wireless Networking.....	12
3. Step-by-Step Installation Guide.....	19
3.1 Install the IEEE802.11b WLAN Driver / Utility	20
3.2 Install the USB Card	23
3.3 IEEE802.11b USB WLAN Utility	26
3.4 Basic Setting for Infrastructure Mode.....	27
3.5 Basic Setting for 802.11Ad Hoc Mode/Ad Hoc Mode	28
3.6 Advanced Settings.....	30
3.7 Encryption Function.....	31
3.8 Remove your USB Card.....	33
3.9 Uninstall the IEEE802.11b USB WLAN Utility / Driver.....	34
4. Using the Utility.....	35
4.1 LAN Status Tab.....	35
4.2 Link Information Tab	36
4.3 Site Survey	36
4.4 Diagnostic Tab.....	37
4.5 About.....	37
5. Network Application	38
5.1 Surveying the Network Neighborhood	38
5.2 File Sharing	39
5.3 Using the Shared Folder	40

1. Welcome

Thank you for purchasing our IEEE802.11b Wireless LAN USB Card, and welcome to Wireless LAN—the easy way to wireless networking.

This user guide introduces to you the IEEE802.11b Wireless LAN USB Card and describes the most common configurations, which will help you connect to your network easily.

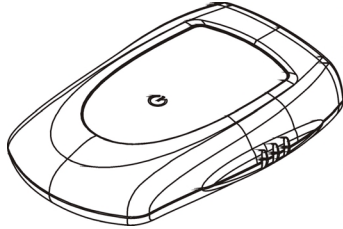
Please read this manual to get familiar with the IEEE802.11b Wireless LAN. This manual contains detailed instructions in operation of this product. Please keep this manual for future reference.

As this product is designed to run under Microsoft Windows, it is recommended that to be installed by people who are familiar with the installation procedures for network operating systems under Microsoft Windows.

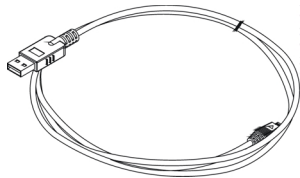
1.1 Kit Contents

The IEEE802.11b USB Wireless LAN kit should include the following items: 1 USB Card, 1 USB Cable, 1 CD, Quick Start Guide and User's Guide.

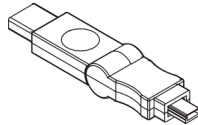
- a. 1 USB Card



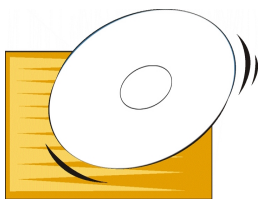
- b. 1 USB Cable



- c. Adapter (Optional)



- d. 1CD including:



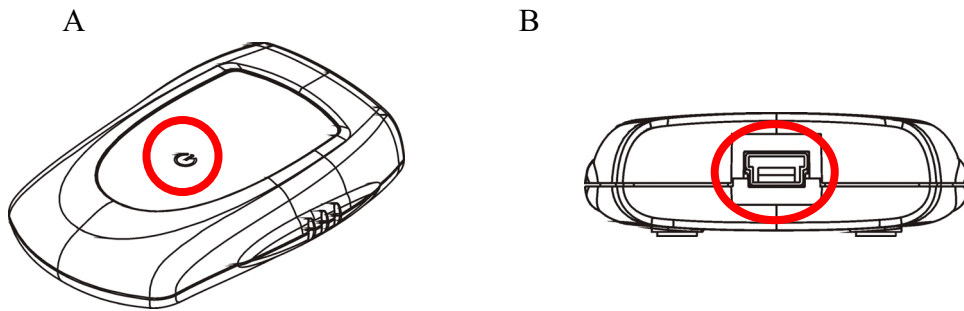
1. IEEE802.11b USB WLAN Utility & Driver software
2. Acrobat Reader
3. User Manual PDF file

- e. Quick Start Guide

- f. User's Guide (this document)

If any of the items mentioned above are damaged or missing, please contact your distributor.

1.2 Main Features of WLAN USB Card



A. Status LED

- Off: No wireless activity
- Blinking: Searching for the Access Point (disconnected)
- Steady Red: Connected to Access Point, or, being in 802.11 Ad Hoc mode (either connected or disconnected).

B. USB Connector

USB WLAN Adapter features:

1. High-speed wireless connection, up to 11 Mbps
2. IEEE802.11b (DSSS) standard for 2.4 GHz Wireless LAN
3. Plug-and-Play installation
4. Solid design with an integrated antenna
5. Full mobility and seamless cell-to-cell roaming
6. Automatic scale back at per packet level

USB WLAN Adapter supports:

1. Automatic load balancing for optimized bandwidth
2. Advanced power management
3. Windows98SE, ME, 2000, XP, XP 2nd edition (subject to availability) and Windows CE (subject to availability).

1.3 Wireless Networking Scenarios

As our IEEE802.11b Wireless LAN USB Card is interoperable and compatible with other IEEE 802.11b compliant products from other manufacturers, it offers you the most freedom to establish your ideal wireless network. Therefore, after installing IEEE802.11b USB Wireless LAN, you can connect your computer to:

- a. A Peer-to-Peer Workgroup of IEEE802.11b compliant wireless devices.
- b. A LAN (Local Area Network) constructed by Access Point(s) or other IEEE802.11b compliant systems.
- c. Share your Internet access by using just one connection, share printers and other peripheral devices, share data and image files between networked PCs, play multi-player games, and use other network enabled sharing resources.

A. Peer-to-Peer Networking:

An Ad Hoc Network could be easily set up with some PCs and this IEEE802.11b WLAN USB Card or our other WLAN devices. Therefore, it is very suitable to build a network for temporary use, such as for demonstration in exhibition, for new sales point/branch use and alike.

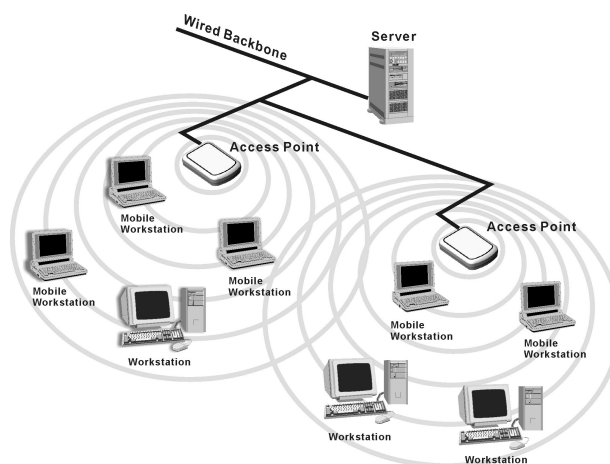


B. Cooperate LAN (Local Area Networking):

With some IEEE802.11b USB WLAN Adapters and Access Points, it is easy to construct a LAN with access to Internet for enterprise use.

The construction is quite easy that the USB Card and Access Point will automatically work at the most suitable frequency when Access Point is set within the proper range.

In addition, commonly manufacturers will bundle the Site-Survey tool for users to check the communication quality.



1.4 Advantages for Using Wireless Network

IEEE802.11b WLAN USB Card can wirelessly transmit and receive data, minimizing the need for wired connections, at a speed of up to eleven megabit per second. With the IEEE802.11b WLAN USB Card you can locate your PC wherever you want without wires and cables.

The IEEE802.11b WLAN USB Card provides LAN users with an access to real-time information anywhere in their organization. The mobility provides effectiveness and efficiency, which are not available under wired networks.

The IEEE802.11b WLAN USB Card configuration is easy to switch between peer-to-peer networks, suitable for a small number of users, and full infrastructure networks of thousands of users that allow roaming around a broad area.

Therefore, you may see many advantages for adopting Wireless Networking as follows:

- *Less Space Limits:* The USB Card provides access to network services without wires; therefore, it gives you more freedom to allocate and style your living and working space. In addition, in some areas where is hard or expensive to connect to wired networks, such as historic buildings, classrooms or mobile connectivity, then you can count on wireless networking.
- *Flexible Workgroups and Lower Cost:* For workspaces that are frequently reconfigured for temporarily use such as demo in exhibitions, wireless networking is easy to set up of lower total cost—and all equipments are recyclable. You do not have to remove the old wires and then build up the new ones again and again.
- *Networked Conference Rooms:* Users can access the network as they move from a meeting to another, getting the access to information/data and the ability to communicate decisions while “on the go”.
- *Ad Hoc Networking:* On site consulting and small workgroups may increase productivity with quick network setup and collaboration software.
- *Branch office Networking:* With an Access Point to bridge between the LAN and Internet, wireless networking provides an easy to install, use and maintain network for a remote or sales office.
- *Campus-Wide Network Mobility:* The roaming capabilities allow enterprise to set up easy to use wireless networks that cover the entire campus transparently.