WPC54A 802.11a PC Card

User's Manual

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1 Introduction

1.1 Scope

This user's guide provides the necessary information for first-time users to successfully install the 802.11a Network Driver Interface Specification (NDIS) driver, for the purpose of evaluating and/or operating the 802.11a Station in a Microsoft Windows environment. This guide also provides information for users who wish to upgrade the 802.11a NDIS driver from previous releases.

1.2 Objectives

This guide describes the steps required to install NDIS drivers for the 802.11a Wireless LAN Network Adapter in Windows 2000, Windows Millennium Edition, Windows 98 Second Edition, Windows XP, and Windows NT 4.0. This guide also includes detailed instructions for configuring the PC Card device, or IEEE 802.11a station (STA) to interact with an access point (AP) in infrastructure mode and with other STAs in ad hoc mode. Instructions for installing or upgrading the diagnostic utility LinkMon are also included. You should also read this before proceeding to install the 802.11a Wireless LAN Network Adapter and NDIS driver in the targeted operating system (OS) environment.

1.3 Intended Audience

This document is intended for 802.11a customers who wish to install and evaluate the 802.11a PC Card in the supported Microsoft Windows environments.

1.4 Features

The 802.11a Wireless LAN Network Adapter is an IEEE 802.11a two-chip solution reference design based on the 802.11a AR5110 and AR5210 chipset. This reference design implements a half-duplex, Orthogonal Frequency Division Multiplexing (OFDM) baseband processor supporting all IEEE 802.11a data rates (6 to 54 Mbps). It also supports the 802.11a Turbo Mode[™] supporting data rates up to 72 Mbps. The host interface is compliant with the PC Card 7. 1 standard.

1.5 Package Contents

Make sure the following materials are available before you begin:

- 802.11a CD, or electronic equivalent
- 802.11a Wireless LAN Network Adapter

1.6 System Reguirements

- 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/Windows NT 4.0 (with Service Pack 6)

2 Windows 2000

2.1 Driver Installation (First-time Install)

We recommend that you remove any existing 802.11a drivers on the PC system before installing the new Version release of the NDIS driver. See Section 2.4 for the instructions on how to remove previous driver releases.

Insert the 802.11a Wireless LAN Network Adapter into a 32-bit CardBus Slot and follow these steps to install the NDIS driver:

1. Wait for the following dialog box to display, and click Next to continue.



2. Choose "Search for a suitable driver for my device (recommended)," and click Next.

Found New Hardware Wizard			
Install Hardware Device Drivers A device driver is a software program that enables a hardware device to work with an operating system.			
This wizard will complete the installation for this device:			
A device driver is a software program that makes a hardware device work. Windows needs driver files for your new device. To locate driver files and complete the installation click Next. What do you want the wizard to do?			
Search for a suitable driver for my device (recommended)			
C Display a list of the known drivers for this device so that I can choose a specific driver			
< <u>B</u> ack <u>N</u> ext > Cancel			

3. Insert the CD in your CD-ROM drive. Choose "Specify a location" under "Optional search locations", and click Next to continue.

ound New Hardware Wizard	
Locate Driver Files Where do you want Windows to search	for driver files?
Search for driver files for the following ha	ardware device:
The wizard searches for suitable drivers any of the following optional search loca	in its driver database on your computer and in tions that you specify.
To start the search, click Next. If you are insert the floppy disk or CD before clickir	e searching on a floppy disk, or CD-ROM drive, ng Next.
Optional search locations:	
Floppy <u>d</u> isk drives	
CD-ROM drives	
Specify a location	
Microsoft Windows Update	
	< <u>B</u> ack <u>N</u> ext> Cancel

4. Browse to the location where the NDIS driver is located (assuming D: is the CD-ROM drive), the default folder is D: \ndis\bin\production\ndis Click OK to continue.

Found Nev	v Hardware Wizard	×
	Insert the manufacturer's installation disk into the drive selected, and then click OK.	OK Cancel
	<u>C</u> opy manufacturer's files from: D:\ndis\bin\production\ndis5	Browse

5. When you find the 802.11a driver installation file (net5210b.inf), click Next to continue.

Found New Hardware Wizard
Driver Files Search Results The wizard has finished searching for driver files for your hardware device.
The wizard found a driver for the following device:
E thernet Controller
Windows found a driver for this device. To install the driver Windows found, click Next.
d:\ndis\bin\production\ndis5\net5210b.inf
≺ <u>B</u> ack <u>Next></u> Cancel

6. The 802.11a NDIS evaluation driver currently does not have a digital signature from Microsoft. Therefore, Windows 2000 shows a warning message. Click Yes to proceed with driver installation.

Digital Signature Not Fou	ind	×
	The Microsoft digital signature affirms that software has been tested with Windows and that the software has not been altered since it was tested. The software you are about to install does not contain a Microsoft digital signature. Therefore, there is no guarantee that this software works correctly with Windows. 802 11a Wireless LAN Networl Adapter If you want to search for Microsoft digitally signed software, visit the Windows Update Web site at http://windowsupdate.microsoft.com to see if one is available. Do you want to continue the installation?	
	Yes <u>No</u> More Info	

7. Click Finish to complete the driver installation. See Section 2.5 for the device configuration.

Upgrade Device Driver Wizard		
	Completing the Upgrade Device Driver Wizard 802.11a Wireless LAN Network Adapter	
	Windows has finished installing the software for this device. The hardware you installed will not work until you restart your computer.	
	To close this wizerd, click Finish.	
	< <u>Back</u> Finish Cancel	

2.2 Driver installation (Previous Driver Installed)

If the system already has a previous release of the 802.11a NDIS installed, Windows does not prompt for the device driver when the WLAN Card is inserted. Follow the steps below to update NDIS driver:

1. Start System Properties from Control Panel. Under Hardware tab, click Device Manager.

eneral N	letwork Identification Hard	ware User Profiles Advanced	1
Hardwar	re Wizard		
*	The Hardware wizard help unplug, eject, and configu	s you install, uninstall, repair, re your hardware.	
		Hardware Wizard	
-Device I	Manager		, i
The Device Manager lists all the hardware devices on your computer. Use the Device Manager to cha properties of any device.		all the hardware devices installed Device Manager to change the	I
	Driver Signing	Device Manager	
Hardwar	re Profiles		- 5
Ð	Hardware profiles provide different hardware configu	a way lor you to set up and store rations.	
-		Hardware <u>P</u> rofiles	1

2. Within Device Manager, right-click "802.11a Wireless LAN Network Adapter" under "Network adapters" device node, and click Properties.

3. Click "Update Driver..." from the Driver tab. Note the Driver Version that you are updating from. You may need to verify this field again after driver update completes to make sure the driver has been updated correctly.

802.11a	Wireless LAN Net	work Adpater	? x
General	Advanced Settin	ngs Driver Resources	
	802.11a Wireles	s LAN Network Adpater	
	Driver Provider	GemTek	
	Driver Date:	Not available	
	Driver Version:	1.0.0.0	
	Digital Signer:	Not digitally signed	
To view Details, the driv	v details about the c To uninstall the driv er files for this devic	Inver files loaded for this device, click Driver ver files for this device, click Uninstall. To upd :e, click Update Driver.	ate
	Driver Details	Update Driver.	

4. Click Next to continue.

Upgrade Device Driver Wizard		
	Welcome to the Upgrade Device Driver Wizard This wizard helps you upgrade a device driver for a hardware device.	
	To continue, click Next.	
	< <u>₿</u> ack Next> Cancel	

5. Choose "Display a list of the known drivers for this device so that I can choose a specific driver," and click Next to continue.

A dev an op	ardware Device Drivers ice driver is a software program that enables a hardware device to work with erating system
This w	vizard upgrades drivers for the following hardware device:
H H	802.11a Wireless LAN Network Adpater
Upgra perfori	ding to a newer version of a device diiver may add functionality to or improve the mance of this device.
What	do you want the wizard to do?
C	Search for a suitable driver for my device (recommended)
۰	Display a list of the known drivers for this device so that I can choose a specific driver