Actiontec

Expanding Your World of Data Communications

USER INSTALLATION MANUAL

Of Wireless LAN 802.11a/g Dual Band PCI Adapter

802PAG

Version: 01
Date: 09/03/03

Contents:

802.11a/g Wireless LAN

Device Description

The 802PAG is a Wireless PCI adapter to support IEEE 802.11b/g and/or 802.11a standard. This adapter can be configured to support either 802.11b/g only or 802.11abg standard.

System Requirements

Desktop PC containing:

- 32-bit PCI Bus slot
- 32 MB memory or greater
- 300 MHz processor or higher

Microsoft Windows 2000 / Windows Me / Windows 98 second Edition / Windows XP / Windows NT 4.0 (with Service Pack 6)

Windows 2000

Driver Installation (First-Time Installation)

This section describes the 1st time installation for the driver for Windows 2000.
Insert 802PAG into a PCI Bus slot and follow these steps to install the NDIS driver:

1. Wait for the Found New Hardware Wizard dialog box to display.
2. Click Next to continue.
3. Choose "search for a suitable driver for my device (recommended)."
4. Click Next.
5. Insert the release CD into the CD-ROM drive.
6. Choose Specify a location under "Optional search location."
7. Click Next to continue.
8. Browse to the NDIS driver directory.
9. Click OK to continue.
10. The 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.
11. Click Finish to complete the driver installation.

ACU Installation and Driver Update

There is an InstallShield utility to upgrade the NDIS driver, if a previous release is installed, and to install the Atheros Client Utility (ACU).

When an NDIS driver has been previously installed, insert the 802PAG into a PCI Bus. Follow these steps to update the NDIS driver:

1. Open the InstallShield Wizard (setup.exe).
2. Click Next to continue.
3. Click 'Yes' to accept the License Agreement.
4. The Setup Type page provides selections as summarized in Table 1. Choose the selection appropriate for your network.

   Table 1. **Setup Type Page Selections**

Selection	Description
Install Driver and ACU	Recommended. Updates driver and installs the ACU.
Install Driver Only	Installs NDIS driver only
Install ACU Only	Installs ACU only.
Make Driver Installation Diskettes	Creates ACU installation diskettes.

5. Click Next to continue.
6. Choose the destination location. Click Next to continue.
7. Specify the program folder to store start icons.
8. Use the checkbox to enable the ACU tray icon and start the ACU when restarting the system. The tray icon will appear in the Windows System Tray.
9. If a previous release of the ACU is installed, make sure it isnot currently running. Click Next to continue
   If you are running a previous version of the ACU, a dialog box will appear requesting an exit from the program. Click OK and continue.
10. The Atheros NDIS evaluation driver currently does not have a digital signature from Microsoft, so Windows 2000 may show a warning message. Click Yes to proceed with driver installation.
11. Click Finish when the InstallShield Wizard is complete.

Driver and ACU uninstallation

This section provides information about uninstallation procedures.
To uninstall the ACU and the NDIS driver:
Use the InstallShield Updater to uninstall the NDIS driver and ACU application and
remove them from the Device Manager.

1. Open the InstallShield Wizard (setup.exe).
2. Click Next to continue.
3. Click 'Yes' to accept the License Agreement.
4. On the Setup Type page, choose Uninstall Driver and Applications to uninstall
   drivers and ACU. Click Next to contine.
5. Click Finish when the InstallShield Wizard is complete.

Some files left on the system to ease reinstallation. Use the following instruction to
completely remove these files.

1. Go to the Start menu and choose Search For Files or Folder…
2. Enter oem*.inf in the "Search for files or folders named "field", and enter
   Atheros in the "Containing text:" field.
3. Click Search Now.
   A few files matching these criteria are possible, if previous drivers have not been
   removed properly.
4. Choose the files that have been found and delete them from the system.
5. To complete the uninstallation, remove the file ar5211.sys from the
   \WINNT\system32\drivers folder.

Device Configuration

Use the ACU to configure the device driver. The ACU provides extensive online help to
aid in configuring the device.
Access ACU by clicking the Start button and choosing Programs > Atheros >ACU. The
ACU tray icon is displayed in the right side of the Toolbar. Launch the ACU by double-
clicking the tray icon, or by right-clicking the tray icon and selecting Launch Station
utility.

LED Indicator

There are two LED indicators.

LED Functionality

LED0 (Power)	LED1 (Netowrk)	Meaning	Comments
Slow-rate blink	OFF	Power save mode (default from power up or reset)	
ON	OFF	Awake	The hardware automatically enter this state after exit from power save mode before any other activity. Changes from power save mode to this state might not be visible on the LEDs if the software assumes control of the LED blinking by writing to the PCI configuration register.
Alternate blink	Alternate blink	Looking for network association	Power LED goes ON; Network LED is OFF; then Power LED goes OFF and Network LED goes ON
Slow-rate blink	Slow-rate blink	Associated or joint with network; no activity	
Fast-rate blink	Fast-rate blink	Associated or joint with network; blink rate increases with activity on the network over the air or locally on the network device based on setting of the PCI configuration register	
OFF	OFF	No power applied to the card	

Regulatory Compliance Information

Radio Frequency Interference Requirements

This device is restricted to indoor use due to its operations in the 5.15 to 5.25 GHz frequency range. FCC requires this product to be used indoors for the frequency range 5.15 to 5.25 GHz to reduce the potential for harmful interference to co-channel Mobile Satellite systems.

High power radars are allocated as primary users of the 5.25 to 5.35 GHz and 5.65 to 5.85 GHz bands. These radar stations can cause interference with and/or damage this device.

Declaration of Conformity

We, Actiontec Electronics, Inc. located in
760 North Mary Ave., Sunnyvale, CA 94086 USA

declare under our sole responsibility that the product 802PAG – 802.11a/b/g Dual Band PCI Adapter complies with Part 15 of 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 my cause undesired operation.

FCC Warning

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, with 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 methods:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and the receiver.
- Connect the equipment into an outlet on a circuit different from that which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Modifications made to the product, unless expressly approved by Actiontec Electronics, Inc. could void the user's authority to operate the equipment.

Important Note:

To comply with FCC RF exposure compliance requirements the antennas used for this transmitter must be installed to provide a separation distance of at least 20 cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter.

For questions regarding your product, or the FCC declaration, please contact:

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