

IBM[®] 11a/b/g Wireless LAN
Mini PCI Adapter II



User's Guide

IBM® 11a/b/g Wireless LAN
Mini PCI Adapter II



User's Guide

ATTENTION

Refer to the documentation that comes with your computer before installing the product.

Note

Be sure to keep your proof of purchase, because it might be required for warranty services. (For more information, refer to *Product warranty and notices for IBM 11a/b/g Wireless LAN Mini PCI Adapter II.*)

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Read first – Safety information

Before installing this product, read the Safety Information.

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Antes de instalar este produto, leia as Informações de Segurança.

在安装本产品之前，请仔细阅读 **Safety Information**
(安全信息)。

Prije instalacije ovog produkta obavezno pročitajte Sigurnosne Upute.

Před instalací tohoto produktu si přečtěte příručku bezpečnostních instrukcí.

Læs sikkerhedsforskrifterne, før du installerer dette produkt.

Ennen kuin asennat tämän tuotteen, lue turvaohjeet kohdasta Safety Information.

Avant d'installer ce produit, lisez les consignes de sécurité.

Vor der Installation dieses Produkts die Sicherheitshinweise lesen.

Πριν εγκαταστήσετε το προϊόν αυτό, διαβάστε τις πληροφορίες ασφάλειας (safety information).

לפני שתתקינו מוצר זה, קראו את הוראות הבטיחות.

A termék telepítése előtt olvassa el a Biztonsági előírásokat!

Prima di installare questo prodotto, leggere le Informazioni sulla Sicurezza.

製品の設置の前に、安全情報をお読みください。

본 제품을 설치하기 전에 안전 정보를 읽으십시오.

Пред да се инсталира овој продукт, прочитајте информацијата за безбедност.

Lees voordat u dit product installeert eerst de veiligheidsvoorschriften.

Les sikkerhetsinformasjonen (Safety Information) før du installerer dette produktet.

Przed zainstalowaniem tego produktu, należy zapoznać się z książką "Informacje dotyczące bezpieczeństwa" (Safety Information).

Antes de instalar este produto, leia as Informações sobre Segurança.

Перед установкой продукта прочтите инструкции по технике безопасности.

Pred inštaláciou tohto zariadenia si pečítajte Bezpečnostné predpisy.

Pred namestitvijo tega proizvoda preberite Varnostne informacije.

Antes de instalar este producto lea la información de seguridad.

Läs säkerhetsinformationen innan du installerar den här produkten.

安裝本產品之前，請先閱讀「安全資訊」。

General safety guidelines

Always observe the following precautions to reduce the risk of injury and property damage.

Service

Do not attempt to service a product yourself unless instructed to do so by the IBM® Support Center. Use only an IBM authorized service provider who is approved to repair your particular product.

Note: Some parts can be upgraded or replaced by the customer. These parts are referred to as Customer Replaceable Units, or CRUs. IBM expressly identifies CRUs as such, and provides documentation with instructions when it is appropriate for customers to replace those parts. You must closely follow all instructions when performing such replacements. Always make sure that the power is turned off and that the product is unplugged from any power source before you attempt the replacement. If you have any questions or concerns, contact the IBM Support Center.

Power cords and power adapters

Use only the power cords and power adapters supplied by the product manufacturer.

Never wrap a power cord around the power adapter or other object. Doing so can stress the cord in ways that can cause the cord to fray, crack or crimp. This can present a safety hazard.

Always route power cords so that they will not be walked on, tripped over, or pinched by objects.

Protect the cord and power adapters from liquids. For instance, do not leave your cord or power adapter near sinks, tubs, toilets, or on floors that are cleaned with liquid cleansers. Liquids can cause a short circuit, particularly if the cord or power adapter has been stressed by misuse. Liquids can also cause gradual corrosion of the power cord terminals and/or the connector terminals on the adapter which can eventually result in overheating.

Always connect power cords and signal cables in the correct order and ensure that all power cord connectors are securely and completely plugged into receptacles.

Do not use any power adapter that shows corrosion at the ac input pins and/or shows signs of overheating (such as deformed plastic) at the ac input or anywhere on the power adapter.

Do not use any power cords where the electrical contacts on either end show signs of corrosion or overheating or where the power cord appears to have been damaged in any way.

Extension cords and related devices

Ensure that extension cords, surge protectors, uninterruptible power supplies, and power strips that you use are rated to handle the electrical requirements of the product. Never overload these devices. If power strips are used, the load should not exceed the power strip input rating. Consult an electrician for more information if you have questions about power loads, power requirements, and input ratings.

Plugs and outlets

If a receptacle (power outlet) that you intend to use with your computer equipment appears to be damaged or corroded, do not use the outlet until it is replaced by a qualified electrician.

Do not bend or modify the plug. If the plug is damaged, contact the manufacturer to obtain a replacement.

Some products are equipped with a three-pronged plug. This plug fits only into a grounded electrical outlet. This is a safety feature. Do not defeat this safety feature by trying to insert it into a non-grounded outlet. If you cannot insert the plug into the outlet, contact an electrician for an approved outlet adapter or to replace the outlet with one that enables this safety feature. Never overload an electrical outlet. The overall system load should not exceed 80 percent of the branch circuit rating. Consult an electrician for more information if you have questions about power loads and branch circuit ratings.

Be sure that the power outlet you are using is properly wired, easily accessible, and located close to the equipment. Do not fully extend power cords in a way that will stress the cords.

Connect and disconnect the equipment from the electrical outlet carefully

Batteries

An important note regarding Lithium-Ion batteries:

When a Lithium-Ion battery overheats or experiences a short circuit, pressure and temperature can increase inside the battery cells. The cells are designed to release pressure and cell materials through vents in the cell can. This design is an important safety feature.

IBM has received a number of reports from customers that the Lithium-Ion batteries in their portable computers have overheated and “vented”. Some customers reported hearing a hissing, cracking or popping sound immediately before these incidents. Smoke, sparks, and in some instances flames may escape from the battery during these incidents. The battery pack may become extremely hot and the heat may cause the bottom of the portable computer to become deformed. In extreme circumstances, the heat may create a hole in the bottom of the computer. Reports of these types of incidents have not been limited to IBM products or portable personal computers.

Users are encouraged to comply with the instructions below and to visit IBM*s Safe and Effective Computing web site at <http://www.pc.ibm.com/us/safecomp.html> regularly for the latest information. Portable personal computers typically include a rechargeable battery pack.

Portable and desktop personal computers may also include a coin-sized internal battery that provides power to the system clock when the machine is unplugged. The following information applies to all such batteries:

- Only use battery packs and charging devices that have been approved by IBM for use with your particular product.
- Follow instructions included with your product when charging and operating the battery.
- Do not open or service your battery. Contact the IBM Support Center for assistance.
- Do not crush, puncture, or incinerate the battery pack or short circuit the battery contacts.
- Do not expose the battery to liquids.
- Keep the areas around battery compartments, electrical connectors, and device bays clean and free of debris, particularly stray metal.
- If your battery is damaged, or if you notice a discharge from your battery or the buildup of foreign materials on the battery leads, stop using the battery, obtain an approved replacement, and properly discard the original battery.

- The rechargeable battery in your portable personal computer will provide better performance and longer life if you cycle the battery periodically. Cycling involves running the laptop on battery mode until the low power alarm on your battery sounds, then promptly recharging the battery to 100%. You should not allow your battery to remain fully discharged for a long period of time (referred to as a “deep discharge”).
- Batteries may experience a deep discharge if they are left unused for a long period of time. This may shorten battery life and increase the risk of a short circuit. Charge batteries periodically, including spare batteries, to avoid potential problems. Recharging batteries to 40% of their capacity at least once every six months is advisable.
- If your battery will not charge, will not operate very long in battery mode, or if the Battery Health indicator is red (this feature may not be included on your model) you should discontinue using it and obtain an IBM replacement battery. While you may notice a decrease in performance when operating without the battery pack, you may continue to operate the computer using only your AC adapter until you receive your replacement battery. If the replacement battery does not offer improved performance, contact the IBM Support Center for assistance.

Heat and product ventilation

Computers generate heat when turned on and when batteries are charging. Notebook PCs can generate a significant amount of heat due to their compact size. Always follow these basic precautions:

- Do not leave the base of your computer in contact with your lap or any part of your body for an extended period when the computer is functioning or when the battery is charging. Your computer produces some heat during normal operation. Extended contact with the body could cause discomfort or, potentially, a skin burn.
- Do not operate your computer or charge the battery near flammable materials or in explosive environments.
- Ventilation slots, fans and/or heat sinks are provided with the product for safety, comfort, and reliable operation. These features might inadvertently become blocked by placing the product on a bed, sofa, carpet, or other flexible surface. Never block, cover or disable these features.

CD and DVD drive safety

CD and DVD drives spin discs at a high speed. If a CD or DVD is cracked or otherwise physically damaged, it is possible for the disc to break apart or even shatter when the CD drive is in use. To protect against possible injury due to this situation, and to reduce the risk of damage to your machine, do the following:

- Always store CD/DVD discs in their original packaging

- Always store CD/DVD discs out of direct sunlight and away from direct heat sources
- Remove CD/DVD discs from the computer when not in use
- Do not bend or flex CD/DVD discs, or force them into the computer or their packaging
- Check CD/DVD discs for cracks before each use. Do not use cracked or damaged discs

About the IBM 11a/b/g Wireless LAN Mini PCI Adapter II

This section provides information on registering, installing, and using the IBM 11a/b/g Wireless LAN Mini PCI Adapter II.

Product registration

Thank you for purchasing this IBM product. Please take a few moments to register your product and provide us with information that will help IBM to serve you better in the future. Your feedback is valuable to us in developing products and services that are important to you, as well as in developing better ways to communicate with you. Register your option on the IBM Web site at:

www.ibm.com/pc/register

IBM will send you information and updates on your registered product unless you indicate on the Web site questionnaire that you do not want to receive further information.

Product description

If you are using a wireless upgradable model of an IBM ThinkPad computer, you can install the IBM 11a/b/g Wireless LAN Mini PCI Adapter II (hereafter called the *Mini-PCI Card*) in a Mini-PCI Card slot on your computer.

The option kit includes:

- Mini-PCI Card
- Mini-PCI guide

Note: Some models do not require a Mini-PCI guide

- *Installation and User's Guide CD* (containing device drivers and this User's Guide)
- Product warranty and notices for IBM 11a/b/g Wireless LAN Mini PCI Adapter II

Installing the Mini-PCI Card

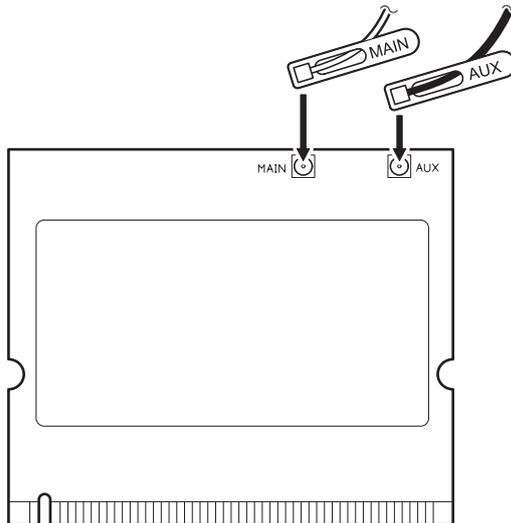
Note

Because the IBM 11a/b/g Wireless LAN Mini PCI Adapter II can be damaged by static electricity, it is shipped in a static-protective bag.

- Do not open the static-protective bag until you are replacing the Mini-PCI Card.
- Touch the package to a metal table or a grounded metal object before removing the Mini-PCI Card from the bag. This action reduces any static electricity from the package and from your body.

Attention: Instructions for replacing the Mini-PCI Card are included in the online help information of your ThinkPad computer. Ensure you have access to a local printer. Press the Access IBM button on your ThinkPad keyboard and enter "mini PCI" in the Keyword Search at the top of the Access IBM application window. Press the **Display** button at the bottom of the Access Help window and print the instructions to replace the Mini-PCI Card.

Connect the cables to the Mini-PCI Card, as shown in the following figure.:



Plug the gray antenna cable with the tab marked "MAIN" into jack MAIN, and the black antenna cable with the tab marked "AUX" into jack AUX.

Installing the device driver

To use the Mini-PCI Card with your ThinkPad computer, first you need to install the device driver necessary to run it.

Installing the device driver in Windows XP and Windows 2000

To install the device driver in Windows XP or Windows 2000, do the following:

1. Start your operating system. Log on with a user ID authorized as an administrator.
2. Click **Start** → **Run**.
3. Specify SETUP.EXE with a full path.
X:\DRIVERS\WLLANATH\SETUP.EXE
where X is the drive letter for your CD-ROM drive).
4. Click **OK**.
5. Follow the instructions on the screen.

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