



Part Number: 92P1285

Wireless Regulatory Notice for ThinkPad R40 Series

This notice is a supplementary document of the "ThinkPad® R40 Series Service and Troubleshooting Guide." Please read this document before you use the ThinkPad R40 Series computer.

The ThinkPad R40 Series computer complies with the radio frequency and safety standards of any country or region in which it has been approved for wireless use. You are requested to install and use your ThinkPad computer in strict accordance with the instructions as described hereafter.

Avis relatif aux appareils sans fil pour les ThinkPad R40 Series

Le présent document complète le manuel "ThinkPad® R40 Series - Guide de maintenance et d'identification des incidents".

L'ordinateur ThinkPad R40 Series est conforme aux normes de radiofréquence et de sécurité en vigueur dans les pays ou régions où son utilisation sans fil a été acceptée. L'ordinateur doit être installé et utilisé conformément aux instructions fournies ci-après. Avant d'utiliser votre ordinateur ThinkPad R40, veuillez lire ce document.

Hinweis zu drahtlosen Einheiten für den ThinkPad R40 Series

Dieser Hinweis ergänzt die Informationen im Handbuch "ThinkPad® R40 - Service und Fehlerbehebung".

Der ThinkPad R40 erfüllt die Funkfrequenz- und Sicherheitsstandards der Länder und Regionen, in denen er für die Verwendung als drahtlose Einheit zugelassen ist. Der ThinkPad R40 muss exakt wie nachfolgend beschrieben installiert und verwendet werden. Lesen Sie unbedingt die entsprechenden Informationen in diesem Dokument, bevor Sie den ThinkPad R40 verwenden.

Aviso de regulación de conexiones inalámbricas para ThinkPad R40 Series

Este aviso es un documento adicional del manual “ThinkPad® R40 Series Guía de servicio y de resolución de problemas”.

El sistema ThinkPad R40 Series satisface los estándares de seguridad y de frecuencia de radio de cualquier país o región en el que se haya aprobado su utilización para conexiones inalámbricas. Se solicita al usuario que instale y utilice el sistema ThinkPad siguiendo estrictamente las instrucciones que se describen a continuación. Antes de utilizar el sistema ThinkPad R40, lea este documento.

Informazioni importanti sulle norme per la tecnologia senza fili per ThinkPad R40 Series

Queste informazioni importanti costituiscono un documento integrativo della Guida all’assistenza e alla risoluzione dei problemi per “ThinkPad® R40 Series.”

L’elaboratore ThinkPad R40 è conforme agli standard di sicurezza e di frequenza radio di ciascun paese in cui è stato approvato per l’utilizzo della tecnologia senza fili. È, quindi, necessario installare ed utilizzare l’elaboratore ThinkPad in stretta osservanza alle istruzioni di seguito riportate. Prima di utilizzare l’elaboratore ThinkPad R40, leggere il presente documento.

ThinkPad R40 Series- tietokoneen langattomien yhteyksien käyttöä koskeva huomautus

Tämä asiakirja on “ThinkPad® R40 Series -tietokone, Käyttö ja vianmääritys” -julkaisun lisäosa.

ThinkPad R40 Series -tietokone on sen maan tai alueen radiotaajuus- ja turvallisuusstandardien mukainen, jossa se on hyväksytty langattomien yhteyksien käyttöä varten. Käyttäjän tulee asentaa ThinkPad-tietokone ja käyttää sitä jäljempänä esitettyjen ohjeiden mukaisesti. Ennen kuin aloitat ThinkPad R40 -tietokoneen käytön, lue tämä asiakirja.

Kennisgeving met betrekking tot draadloze communicatie voor ThinkPad R40 Series

Deze kennisgeving is een aanvulling op de publicatie “ThinkPad® R40 Series Service en probleemoplossing.”

De ThinkPad R40 Series voldoet aan de standaards voor radiofrequenties en veiligheid in elk land of gebied waarin deze computer is goedgekeurd voor draadloos gebruik. U wordt verzocht uw ThinkPad-computer te installeren en

te gebruiken in strikte overeenstemming met de instructies hierna beschreven. Lees dit document voordat u de ThinkPad R40-computer gaat gebruiken.

Bemærkning vedr. den trådløse facilitet i ThinkPad R40 Serie-computeren

Denne bemærkning er et supplement til bogen "ThinkPad® R40 Serie Guide til service og fejlfinding".

ThinkPad R40 Serie-computeren overholder de radiofrekvens- og sikkerhedsstandarder i de lande og områder, hvor den er godkendt til trådløs brug. Du skal installere og bruge ThinkPad-computeren i nøje overensstemmelse med instruktionerne i de følgende afsnit. Læs dette dokument, før du bruger ThinkPad R40-computeren.

Merknad om regulering av trådløs kommunikasjon for ThinkPad R40 Series

Denne merknaden kommer i tillegg til opplysningene i "ThinkPad® R40 Series Håndbok for service og problemløsning"

ThinkPad R40 Series-maskinen er i overensstemmelse med standardene for radiofrekvenssignaler og sikkerhet i alle land eller regioner der den er godkjent for trådlø bruk. Du blir bedt om å installere og bruke ThinkPad-maskinen i henhold til instruksjonene som følger. Du må lese dette dokumentet før du bruker ThinkPad R40-maskinen.

Information om radiokommunikations- och säkerhetsnormer för ThinkPad R40 Series

Det här dokumentet kompletterar informationen i handboken "ThinkPad® R40 Series Service och felsökning".

ThinkPad R40 Series uppfyller radiokommunikations- och säkerhetsnormerna i de länder och regioner där datorn har godkänts för trådlös användning. Användarna måste installera och använda sina ThinkPad-datorer i enlighet med respektive lands bestämmelser om radiokommunikation. Läs det här dokumentet innan du använder ThinkPad R40-datorn.

Aviso Regulador de Dispositivos Sem Fio para ThinkPad R40 Series

Este aviso é um documento complementar do "Guia de Serviços e Resolução de Problemas do ThinkPad® R40 Series".

O computador ThinkPad R40 Series está de acordo com a frequência de rádio e com os padrões de segurança de qualquer país ou região em que seu uso sem fio tenha sido aprovado. Recomendamos que você instale e utilize seu computador ThinkPad

exatamente conforme as instruções, conforme descrito daqui por diante. Antes de utilizar seu computador ThinkPad R40, leia este documento.

ThinkPad R40 시리즈의 와이파이리스規制に関する注意事項

ThinkPad R40 시리즈의 와이파이리스 사용이認められているすべての国および地域で、ThinkPad R40 시리즈は、その国や地域の無線周波数および安全に関する規格を満たしています。ThinkPad の設置と使用については、「使用上の注意と問題判別」およびこの補足資料に記載されている規制に必ず従ってください。

ThinkPad R40 を使用する前に、日本については「使用上の注意と問題判別」の『日本国内で無線 LAN アダプターをご使用になる場合の注意』を、日本以外の国または地域については本資料をお読みください。本資料は、対象となる各国または地域の言語で記述されています。

ThinkPad R40 시리즈의 무선 규격 정보에 관한 주의 사항

이 문서는 "ThinkPad R40 시리즈 사용설명서"의 보충 설명서입니다.

ThinkPad R40 시리즈는 무선을 사용할 수 있도록 인증된 어떠한 국가 또는 지역에서라도 사용될 수 있도록 전파 형식 등록과 안전 기준에 적합하게 만들어졌습니다. 사용설명서에 언급된 지시를 충실히 따라서 ThinkPad를 설치하고 사용하시기 바랍니다. ThinkPad R40 컴퓨터를 사용하기 전에, 반드시 사용 설명서를 읽어 주시기 바랍니다.

ThinkPad R40 系列的无线法规声明

本声明是《ThinkPad® R40 系列服务与故障诊断指南》的补充文档。

ThinkPad R40 系列计算机符合任何已批准无线使用的国家或地区的无线电频率和安全标准。要求您严格遵照以下描述的指示信息来安装和使用 ThinkPad 计算机。在使用 ThinkPad R40 计算机之前，请阅读本文档。

ThinkPad R40 Series 的無線管制注意事項

本注意事項為「ThinkPad® R40 Series 服務與疑難排解手冊」的補充文件。

ThinkPad R40 系列電腦遵守任何國家或地區被核准為無線使用的無線電頻率以及安全標準。您被要求嚴格依照以下所說明的指示安裝以及使用您的 ThinkPad 電腦。在使用 ThinkPad R40 電腦之前，請先閱讀本文件。

USA — Federal Communications Commission (FCC)

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.

I. Permanent integrated Wireless Module

- IBM Dual-Band 11a/b Wi-Fi® Wireless Mini PCI Adapter

i) Installation of the integrated wireless module

The above Dual-Band Mini PCI Adapter is preinstalled by IBM, and is not removable by users. There is no mini-PCI option card supported for this module, and you are not allowed to install it by yourself.

If your card requires replacement via the proper step shown in “Chapter 3. Getting help and service from IBM” of the ThinkPad R40 Series Service and Troubleshooting Guide, IBM will request you to send your computer with the card(s) to IBM so that IBM will repair it.

ii) The FCC RF Safety Requirement

The radiated output power of Wireless LAN Mini-PCI Card and Bluetooth card are far below the FCC radio frequency exposure limits. Nevertheless, the ThinkPad R40 computer shall be used in such a manner that the potential for human contact during normal operation is minimized as follows:

Use of Wireless options

If you find the FCC ID “ANO20020300D3L” on the label at the bottom side of your ThinkPad computer, your computer is approved as a multiple transmitters device that is permitted to use the integrated Wireless LAN Mini-PCI Card and Bluetooth card with one or more wireless option PC Cards in the PC Card slot simultaneously.

Please make sure of the following when you use a Bluetooth option or wireless option PC Card in your ThinkPad computer.

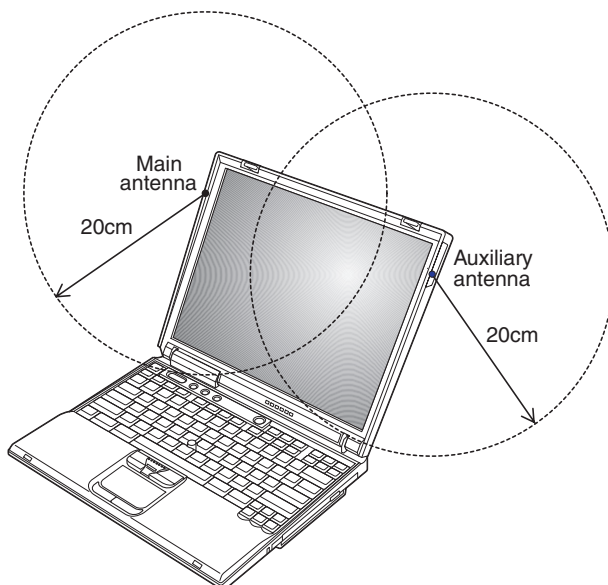
1. Visit the IBM site at www.ibm.com/pc/qtechinfo/MIGR-44156.html and confirm the updated list of RF option devices that have been approved to cooperate with the integrated wireless feature.
2. When you use any other RF option device that is not listed on the IBM site, all other wireless features including the integrated transmitter in your ThinkPad computer are required to be turned off.
3. Users are requested to follow the RF Safety instructions on wireless option devices that are included in the RF option device’s user’s manual.

CAUTION:

To comply with FCC RF exposure compliance requirements, a separation

distance of at least 20 cm (8 inches) must be maintained between the antenna for the integrated Wireless LAN Mini-PCI Card built in to the screen section and all persons.

FCC ID: ANO20020300D3L



Note: IBM Dual-Band 11a/b Wi-Fi® Wireless Mini PCI Adapter implements transmission diversity function. The function does not emit radio frequencies simultaneously from both antennas. One of the antennas is selected automatically or manually (by users) to have good quality of radiocommunication.

iii) Radio Frequency Interference Requirements:

- This device is restricted to indoor use due to its operation 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 radar 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.
- An improper installation or unauthorized use may cause harmful interference to radio communications. Also any tampering of the internal antenna will void the FCC certification.
Refer to the “Appendix E. Notices, Electronic emission notices” of the ThinkPad R40 Series Service and Troubleshooting Guide for more detail.

II. Modular Approved transmitter cards

Mini PCI cards

- IBM High Rate Wireless LAN Mini PCI Adapter III
- Cisco Aironet Wireless 802.11b

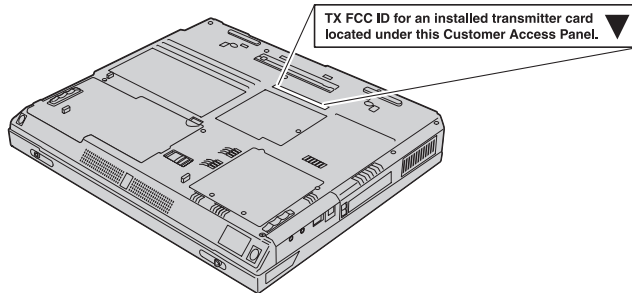
Communication Daughter Card (CDC)

- IBM integrated Bluetooth with 56K Modem

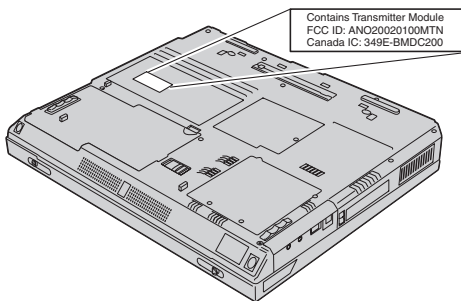
i) FCC ID of Wireless Modules

There is no FCC ID for Mini PCI cards shown on the enclosure of your ThinkPad computer. Instead you will find an indicator pointing the location of the FCC ID at the bottom side of your ThinkPad computer as shown in the figure i-1). As for the CDC, the FCC ID is affixed on your ThinkPad computer as shown in the figure i-2).

i-1) Mini-PCI cards (FCC ID: ANO20020200BRX, ANOU58H004)

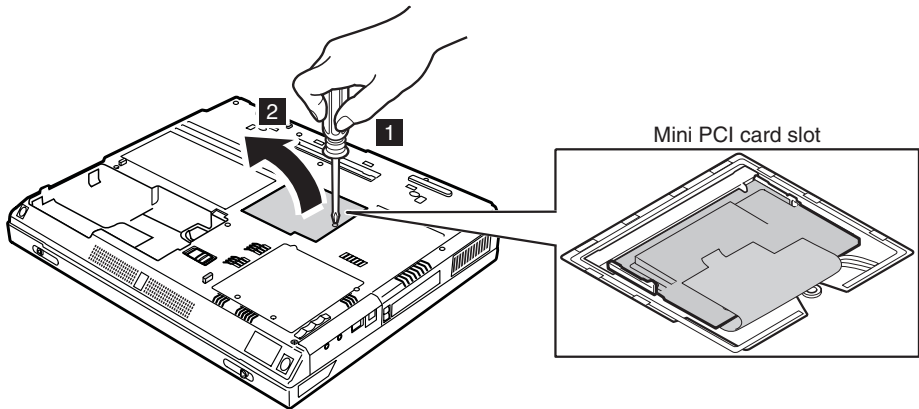


i-2) CDC (FCC ID: ANO20020100MTN)



ii) Installation of approved wireless modules

If no integrated wireless LAN Mini-PCI Card has been preinstalled in your ThinkPad computer, you can install one, provided by IBM as an option. Please plug the option wireless card into the Mini-PCI Card slot located bottom of the computer as shown below.



Attention for the BIOS Lock Protection:

If you install an unauthorized wireless LAN Mini-PCI Card that was not approved to use for the ThinkPad R40 Series computer, the computer does not start, but only displays an error message and emits beeps.

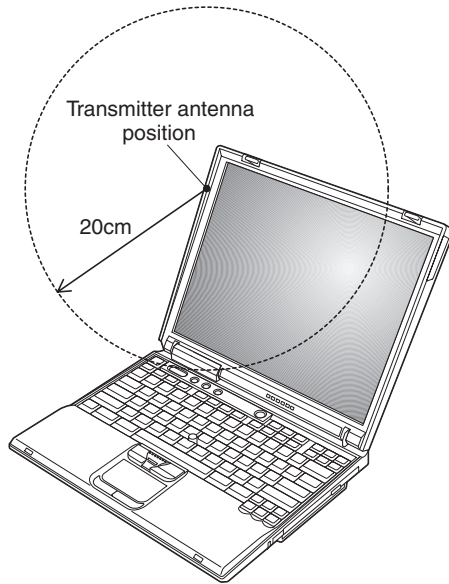
iii) The FCC RF Safety Requirement

The radiated output power of Wireless LAN Mini-PCI Card and Bluetooth card are far below the FCC radio frequency exposure limits. Nevertheless, the ThinkPad R40 computer shall be used in such a manner that the potential for human contact during normal operation is minimized as follows:

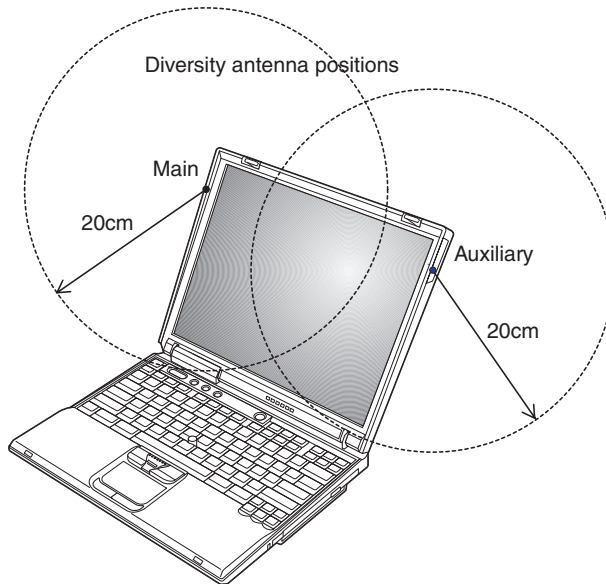
CAUTION:

To comply with FCC RF exposure compliance requirements, a separation distance of at least 20 cm (8 inches) must be maintained between the antenna for the integrated Wireless LAN Mini-PCI Card built in to the screen section and all persons.

IBM High Rate Wireless LAN Mini PCI Adapter III(FCC ID:
ANO20020200BRX)

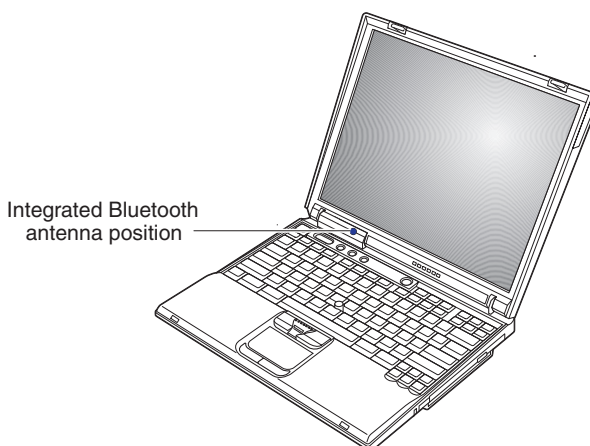


Cisco Aironet Wireless 802.11b (FCC ID: ANOU58H004)



Note: The transmission diversity function is implemented for the Card. The function does not emit radio frequencies simultaneously from both antennas. One of the antennas is selected automatically or manually (by users) to have good quality of radiocommunication.

IBM Integrated Bluetooth with 56K Modem (FCC ID:
ANO20020100MTN)



The antenna of IBM Integrated Bluetooth with 56K Modem is located in the left hinge portion of keyboard. Transmitted energy from the Bluetooth device is very low compared to other RF devices. Therefore a 20 cm separation from the Bluetooth antenna is not required.

Use of Wireless options

Your ThinkPad computer is approved for use of one of the granted Wireless LAN Mini-PCI Cards together with the granted Bluetooth module in the CDC slot, and one or more wireless option PC Cards in the PC Card slot or USB port simultaneously. Please make sure of the following conditions on use of these wireless features.

1. Visit the IBM site at www.ibm.com/pc/qtechinfo/MIGR-43693.html and confirm the updated list of RF option devices that have been approved to cooperate with the integrated wireless feature.
2. When you use any other RF option device that is not listed on the IBM site, all other wireless features including the integrated transmitter in your ThinkPad computer are required to be turned off.
3. Users are requested to follow the RF Safety instructions on wireless option devices that are included in the RF option device's user's manual.

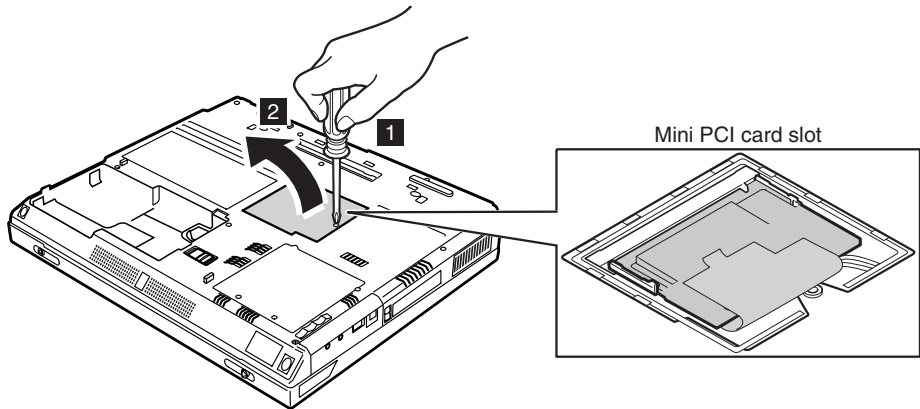
iv) Interference Statement

An improper installation or unauthorized use may cause harmful interference to radio communications. Also any tampering of the internal antenna will void the FCC certification and your warranty. Refer to the “Appendix D. Notices, Electronic emission notices” of the ThinkPad R40 Series Service and Troubleshooting Guide for more detail.

Canada — Industry Canada (IC)

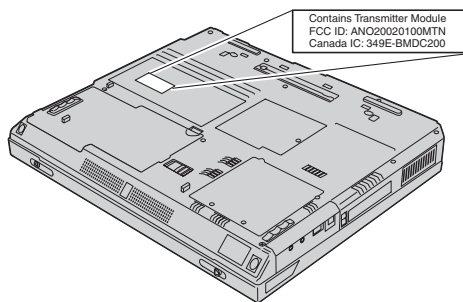
Certification number

Basically the certification number of Industry Canada for each approved Mini-PCI wireless module is affixed on each adapter installed in the Mini-PCI Card slot as shown below.



However some IC certification numbers are indicated on the label at the bottom side of your ThinkPad computer, because users can not easily access to the certification labels of each transmitter module listed below.

- IBM integrated Bluetooth with 56K Modem, “IC: 349E-BMDC200”
- IBM Dual-Band 11a/b Wi-Fi® Wireless Mini PCI Adapter, “IC: 349E-PH11107E”



Attention for the BIOS Lock Protection:

You can install or remove each wireless feature by yourself. However, if you install an unauthorized wireless adapter that is not approved to use for the ThinkPad R40 Series computer, the computer does not start, but only displays an error message and emits beeps.

Low Power License-Exempt Radiocommunication Devices (RSS-210)

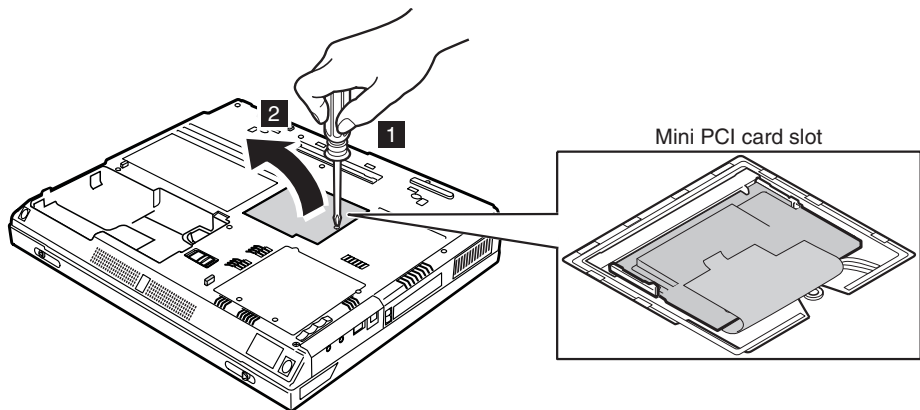
1. Common information: Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.
2. Operation in 2.4GHz band: To prevent radio interference to the licensed service, this device is intended to be operated indoors and away from windows to provide maximum shielding. Equipment (or its transmit antenna) that is installed outdoors is subject to licensing.
3. Operation in 5GHz band:
 - The device for the band 5150-5250 MHz is only for indoor usage to reduce potential for harmful interference to co-channel Mobile Satellite systems.
 - High power radars are allocated as primary users (meaning they have priority) of 5250-5350 MHz and 5650-5850 MHz and these radars could cause interference and/or damage to LELAN(Licence-Exempt Local Area Network) devices.

Exposure of Humans to RF Fields (RSS-102)

ThinkPad R40 Series employ low gain integral antennas that do not emit RF field in excess of Health Canada limits for the general population; consult Safety Code 6, obtainable from Health Canada's website "www.hc-sc.gc.ca/rpb".

Numéro d'homologation

En général, le numéro d'homologation délivré au Canada pour chaque unité Mini-PCI pour réseau local sans fil est apposé sur chaque adaptateur installé dans l'emplacement de carte Mini-PCI, comme indiqué ci-dessous.



Cependant certains numéros d'homologation IC peuvent figurer sur l'étiquette collée sous votre ordinateur ThinkPad, car il n'est pas aisé d'accéder aux numéros d'homologation des adaptateurs suivants:

- Adaptateur intégré IBM Bluetooth avec Modem 56K, "IC: 349E-BMDC200"
- Adaptateur sans fil Mini PCI IBM Dual-Band 11a/b Wi-Fi®, "IC: 349E-PH11107E"

Avertissement concernant la protection contre le verrouillage du BIOS :

Vous pouvez installer ou retirer chaque carte sans fil vous-même. Cependant, si vous avez installé une carte de ce type qui n'est pas homologuée pour l'ordinateur ThinkPad R40 Series, l'ordinateur ne démarrera pas. Un message d'erreur sera affiché et des bips sonores seront émis.

Remarque relative aux appareils de communication radio de faible puissance sans licence (RSS-210)

Le fonctionnement de ce type d'appareil est soumis aux deux conditions suivantes: (1) Cet appareil ne doit pas perturber les communications radio, et (2) cet appareil doit supporter toute perturbation, y compris les perturbations qui pourraient provoquer son dysfonctionnement.

Fonctionnement dans la bande 2.4 GHz : Afin d'éviter toute perturbation des communications radio des appareils sous licence, cet appareil devra uniquement être utilisé en intérieur et à distance de toute fenêtre afin de garantir une protection maximale. Tout équipement (ou toute antenne émettrice associée) installé en extérieur devra faire l'objet d'une licence.

Fonctionnement dans la bande 5 GHz : Tout appareil destiné à la bande 5150–5250 MHz devra être exclusivement utilisé en intérieur afin de réduire les risques de perturbations électromagnétiques gênantes sur les systèmes de satellite mobile dans un même canal. Les radars à forte puissance sont désignés comme les utilisateurs principaux (c'est-à-dire qu'ils sont prioritaires) des bandes 5250–5350 MHz et 5650–5850 MHz. Ils peuvent provoquer des perturbations électromagnétiques sur les appareils de type LELAN (réseau de communication local sans licence) ou les endommager.

Exposition des êtres humains aux champs radioélectriques (RF) (RSS-102)

Le ThinkPad R40 Series utilise des antennes intégrales à faible gain qui n'émettent pas un champ électromagnétique supérieur aux normes imposées par le Ministère de la santé canadien pour la population. Consultez le Safety Code 6 sur le site Web du Ministère de la santé canadien à l'adresse "www.hc-sc.gc.ca/rpb".

Telecommunication notices

Federal Communications Commission (FCC) and Telephone Company Requirements (Part 68 of the FCC Rules)

1. The Telephone Consumer Protection Act of 1991 makes it unlawful for any person to use a computer or other electronic device to send any message via a telephone fax machine unless such message clearly contains in a margin at the top or bottom of each transmitted page or on the first page of the transmission, the date and time it is sent, and an identification of the business or other entity, or other individual sending the message and the telephone number of the sending machine or such business, other entity, or individual.

In order to program this information into your computer, you should be sure to follow the installation instructions for your fax software package.
2. The built-in modem is built into the ThinkPad computer. It complies with Part 68 of the FCC Rules. A label is affixed to the bottom of the computer that contains, among other things, the FCC registration number, USOC, and Ringer Equivalency Number (REN) for this equipment. If these numbers are requested, look at the label and provide this information to your telephone company.
3. The REN is useful to determine the quantity of devices you may connect to your telephone line and still have those devices ring when your number is called. In most, but not all, areas, the sum of the RENs of all devices should not exceed five (5.0). To be certain of the number of devices you may connect to your line, as determined by the REN (REN:0.7), you should call your local telephone company to determine the maximum REN for your calling area.
4. If the built-in modem causes harm to the telephone network, the telephone company may discontinue your service temporarily. If possible, they will notify you in advance. But, if advance notice isn't practical, you will be notified as soon as possible. You will be advised of your right to file a complaint with the FCC.
5. Your telephone company may make changes in its facilities, equipment, operations, or procedures that could affect the proper operation of your equipment. If they do, you will be given advance notice so as to give you an opportunity to maintain uninterrupted service.
6. If you experience trouble with this built-in modem, contact your IBM Authorized Seller, or the IBM Corporation, 500 Columbus Avenue, Thornwood, NY 10594, 1-800-772-2227, for repair/warranty information. The telephone company may ask you to disconnect this equipment from the network until the problem has been corrected, or until you are sure the equipment is not malfunctioning.
7. No customer repairs are possible to the modem. If you experience trouble with this equipment, contact your Authorized Seller or the IBM Corporation for information.

8. The modem may not be used on coin service provided by the telephone company. Connection to party lines is subject to state tariffs. Contact your state public utility commission or corporation commission for information.
9. When ordering network interface (NI) service from the Local Exchange Carrier, specify service arrangement USOC RJ11C.

Fax Branding

The Telephone Consumer Protection Act of 1991 makes it unlawful for any person to use a computer or other electronic device, including fax machines, to send any message unless such message clearly contains in a margin at the top of or bottom of each transmitted page or on the first page of the transmission, the date and time it is sent and an identification of the business or other entity, or other individual sending the message and the telephone number of the sending machine or such business, other entity, or individual. (The telephone number provided may not be a 900 number or any other number for which charges exceed local or long-distance transmission charges.)

Industry Canada requirements

Notice

This equipment meets the applicable Industry Canada Terminal Equipment Technical Specifications. This is confirmed by the registration number. The abbreviation, IC, before the registration number signifies that registration was performed based on a Declaration of Conformity indicating that Industry Canada technical specifications were met. It does not imply that Industry Canada approved the equipment.

Avis

Le présent matériel est conforme aux spécifications techniques d'Industrie Canada applicables au matériel terminal. Cette conformité est confirmée par le numéro d'enregistrement. Le sigle IC, placé devant le numéro d'enregistrement, signifie que l'enregistrement s'est effectué conformément à une déclaration de conformité et indique que les spécifications techniques d'Industrie Canada ont été respectées. Il n'implique pas qu'Industrie Canada a approuvé le matériel.

The Ringer Equivalence Number (REN) for this terminal equipment is 0.3. The REN assigned to each terminal equipment provides an indication of the maximum number of terminals allowed to be connected to a telephone interface. The termination on an interface may consist of any combination of devices subject only to the requirement that sum of the Ringer Equivalence Numbers of all the devices does not exceed five.

L'indice d'équivalence de la sonnerie (IES) du présent matériel est de 0.3. L'IES assigné à chaque dispositif terminal indique le nombre maximal de terminaux qui peuvent être raccordés à une interface téléphonique. La terminaison d'une interface peut consister en une combinaison quelconque de dispositifs, à la seule condition que la somme d'indices d'équivalence de la sonnerie de tous les dispositifs n'excède pas 5.