

User's Manual

(for ThinkPad X40 Series)

The attachment is the part of the user's manual of the specified host device (IBM ThinkPad X40 Series).

The descriptions on page 6 through 12 are related to the regulatory notice on the FCC Part 15, Subpart E.



Part Number: 13N6017

Regulatory Notice for ThinkPad® X40 Series

This notice is a supplementary document of the *ThinkPad X40 Series Service and Troubleshooting Guide*. Please read this document before you use the ThinkPad X40 Series computer.

The ThinkPad X40 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.

Réglementation concernant les ordinateurs ThinkPad X40 Series

Le présent document complète le manuel *ThinkPad X40 Series - Guide de maintenance et d'identification des incidents*.

L'ordinateur ThinkPad X40 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 X40, veuillez lire ce document.

Hinweis zu Einheiten für den ThinkPad X40 Series

Dieser Hinweis ergänzt die Informationen im Handbuch *ThinkPad X40 - Service und Fehlerbehebung*.

Der ThinkPad X40 erfüllt die Funkfrequenz- und Sicherheitsstandards der Länder und Regionen, in denen er für die Verwendung als drahtlose Einheit zugelassen ist. Der ThinkPad X40 muss exakt wie nachfolgend beschrieben installiert und verwendet werden. Lesen Sie unbedingt die entsprechenden Informationen in diesem Dokument, bevor Sie den ThinkPad X40 verwenden.

Aviso de regulación para ThinkPad X40 Series

Este aviso es un documento adicional del manual *ThinkPad X40 Series Guía de servicio y de resolución de problemas*.

El sistema ThinkPad X40 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 X40, lea este documento.

Informazioni importanti sul ThinkPad X40 Series

Queste informazioni importanti costituiscono un documento integrativo della *Guida all'assistenza e alla risoluzione dei problemi per ThinkPad X40 Series*.

L'elaboratore ThinkPad X40 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 X40, leggere il presente documento.

ThinkPad X40 Series- tietokoneen yhteyksien käyttöön jä koskeva huomautus

Tämä asiakirja on *ThinkPad X40 Series -tietokone, Käyttö- ja vianmääritys* -julkaisun lisäosa.

ThinkPad X40 Series -tietokone on sen maan tai alueen radiotaajuus- ja turvallisuusstandardien mukainen, jossa se on hyväksytty langattomien yhteyksien käyttöön ja varten. Käyttäjän tulee asentaa ThinkPad-tietokone ja käyttää sitä jäljempänä esitettyjen ohjeiden mukaisesti. Ennen kuin aloitat ThinkPad X40 -tietokoneen käytön, lue tämä asiakirja.

Kennisgeving voor ThinkPad X40 Series

Deze kennisgeving is een aanvulling op de publicatie *ThinkPad X40 Series Service en probleemoplossing*.

De ThinkPad X40 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 X40-computer gaat gebruiken.

Bemærkning vedr. ThinkPad X40 Serie-computeren

Denne bemærkning er et supplement til bogen *ThinkPad X40 Serie Guide til service og fejlfinding*.

ThinkPad X40 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 X40-computeren.

Merknad for ThinkPad X40 Series

Denne merknaden kommer i tillegg til opplysningene i *ThinkPad X40 Series Håndbok for service og problemløsning*.

ThinkPad X40 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 X40-maskinen.

Bestämmelser för ThinkPad X40 Series

Det här dokumentet kompletterar informationen i handboken *ThinkPad X40 Series Service och felsökning*.

ThinkPad X40 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 X40-datorn.

Aviso Regulador para ThinkPad X40 Series

Este aviso é um documento complementar do *Guia de Serviços e Resolução de Problemas do ThinkPad X40 Series*.

O computador ThinkPad X40 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 X40, leia este documento.

ThinkPad X40 シリーズの規制に関する注意事項

ThinkPad X40 シリーズのワイヤレス使用が認められているすべての国および地域で、ThinkPad X40 シリーズは、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 X40 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 X40 시리즈 규격에 관련된 사항

이 문서는 "ThinkPad X40 시리즈 사용설명서"의 보충 설명서입니다.

ThinkPad X40 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 사용하기 바랍니다. ThinkPad X40 컴퓨터를 사용하기 전에, 반드시 사용 설명서를 읽어 주시기 바랍니다.

ThinkPad X40 系列法規聲明

本声明是《ThinkPad® X40 系列服务与故障诊断指南》的补充文档。

ThinkPad X40 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 X40 计算机之前，请阅读本文档。

ThinkPad X40 Series 的管制注意事項

本注意事項為「ThinkPad® X40 Series 服務與疑難排解手冊」的補充文件。

ThinkPad X40 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 X40 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.

User installable wireless modules

- Mini-PCI Cards
 - Intel® PRO/Wireless LAN 2100 3B Mini PCI Adapter
 - IBM 11a/b/g Wireless LAN Mini PCI Adapter
 - IBM 11b/g Wireless LAN Mini PCI Adapter
- Communication Daughter Card (CDC)
 - IBM Integrated *Bluetooth* III with 56K Modem

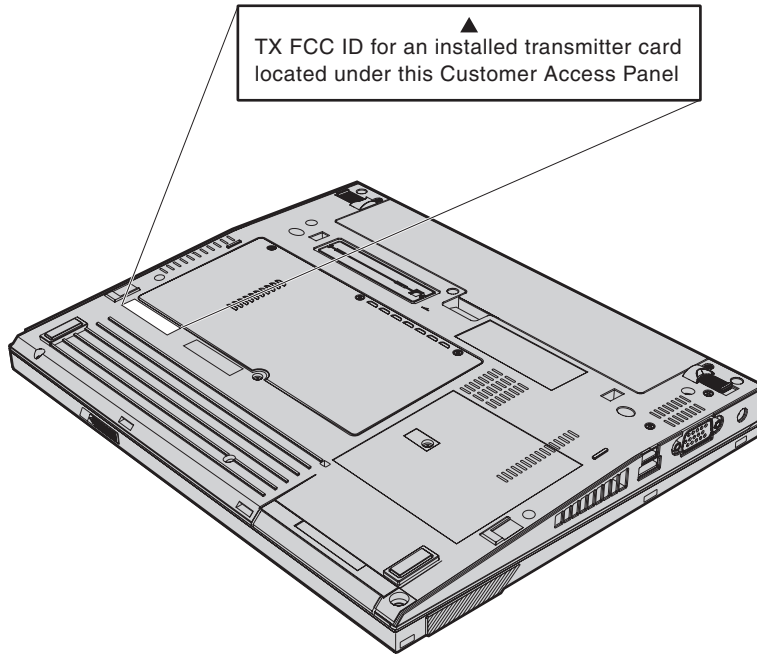
For information concerning the wireless cards announced after the publication of this notice, visit the Web site at www.ibm.com/pc/qtechinfo/MIGR-43693.html

IBM 11b/g Wireless LAN Mini PCI Adapter marketed in US and Canada does not support nor function in the extended channels (12ch, 13ch).

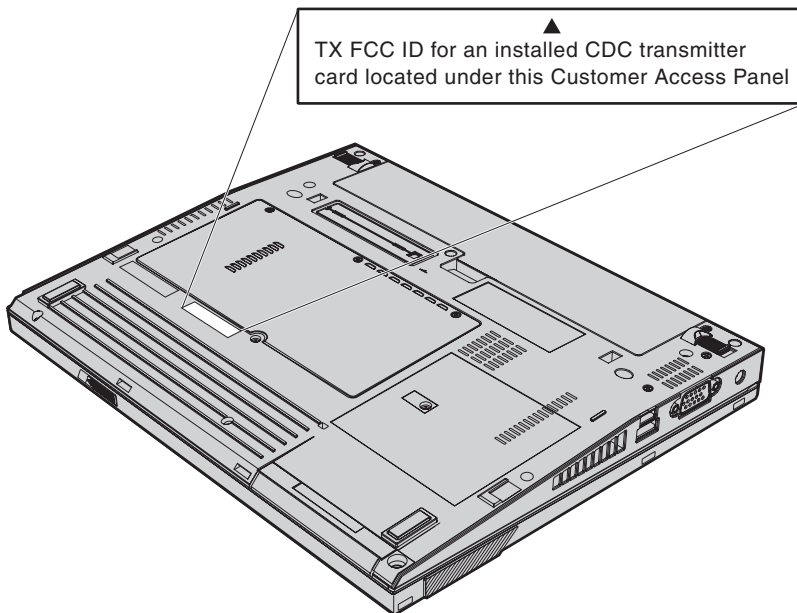
i) FCC ID of wireless modules

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 below in the figure i-1). Also the location of the FCC ID's indicator for CDC is shown by the figure i-2). The FCC IDs are affixed on each approved module installed in the Mini-PCI Card slot or the CDC slot.

i-1) Mini-PCI Cards (FCC ID: ANO20020201CLK, ANO20030400LEG or ANO20030500CMR)

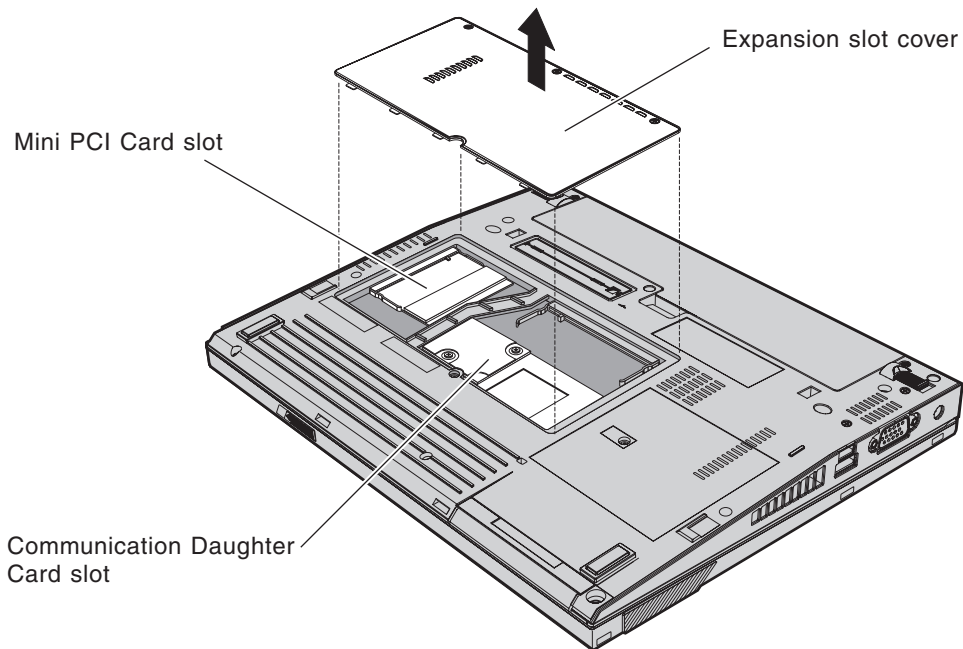


i-2) CDC (FCC ID: ANO20020100MTN)



ii) Installation of approved wireless modules

If no integrated wireless LAN Mini-PCI Card or RF CDC module is 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 or CDC slot located under the expansion slot cover of your ThinkPad computer as shown below.



Attention for the authentication mechanism

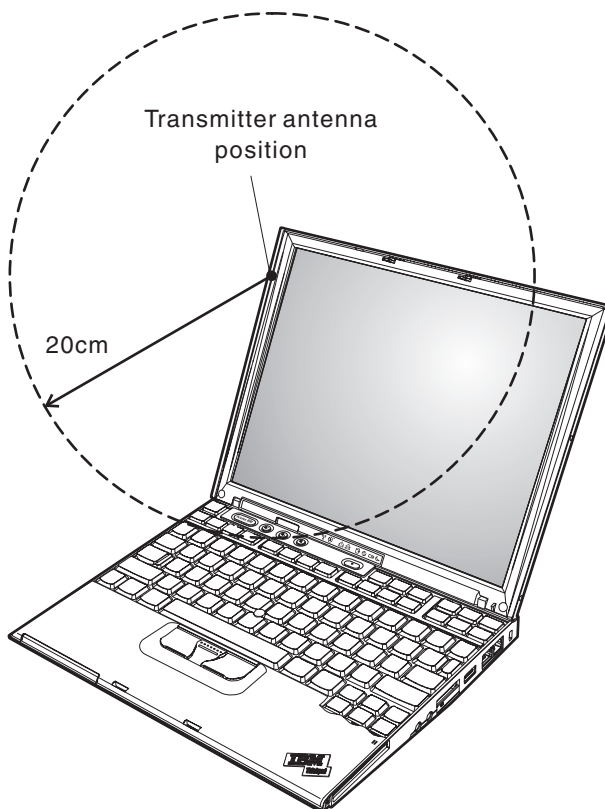
If you install an unauthorized wireless LAN Mini-PCI Card or RF CDC module that is not approved to use for the ThinkPad X40 Series computer, the computer does not start, but only displays an error message and emits beeps.

iii) The FCC RF safety requirement

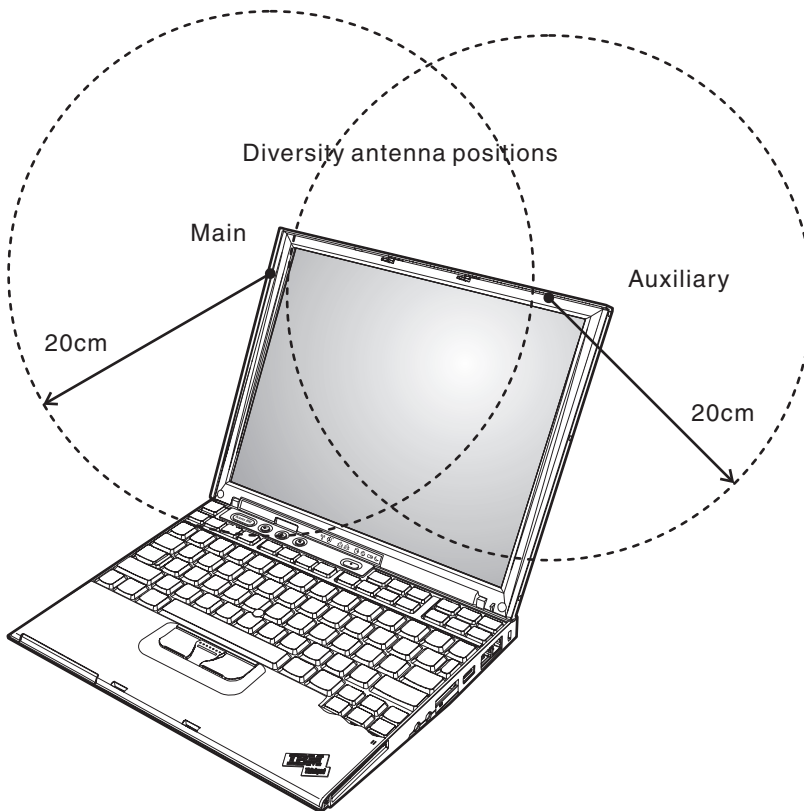
The radiated output power of the Wireless LAN Mini-PCI Cards or RF CDC module authorized to use for the ThinkPad X40 Series computer is far below the FCC radio frequency exposure limits. Nevertheless, the ThinkPad X40 Series computer shall be used in such a manner that the potential for human contact 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. You are not allowed to disable “standby mode” for the power management function, if you cannot maintain the sufficient antenna separation (at least 20 cm) in any case the LCD is left opened or closed.

Intel PRO/Wireless LAN 2100 3B Mini PCI Adapter (FCC ID: ANO20020201CLK)



IBM 11a/b/g Wireless LAN Mini PCI Adapter (FCC ID: ANO20030400LEG) or IBM 11b/g Wireless LAN Mini PCI Adapter (FCC ID: ANO20030500CMR)



Note: The transmission diversity function is implemented for the Card (FCC ID: ANO20030400LEG or ANO20030500CMR). 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.



Note: The antenna of IBM Integrated *Bluetooth* III with 56K Modem is located on the bottom of the computer lid. 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. 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 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) 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 and your warranty. Refer to the “Appendix D. Notices, Electronic emission notices” of the *ThinkPad X40 Series Service and Troubleshooting Guide* for more detail.

Canada — Industry Canada (IC)

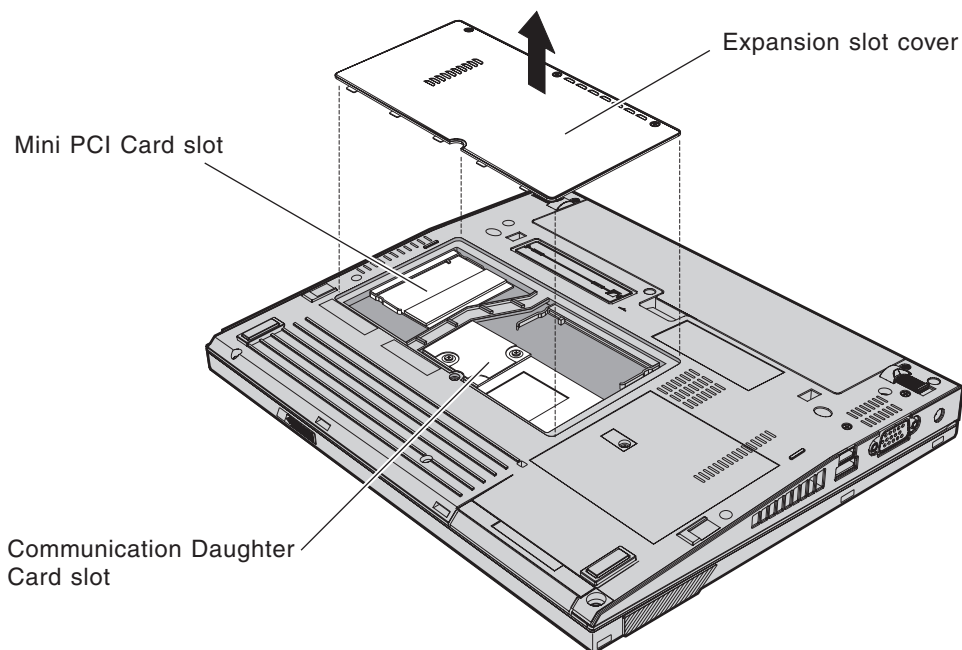
Certification number

The certification number of Industry Canada for each approved Mini-PCI wireless card or RF Communication Daughter Card (CDC) is affixed on each module installed in the Mini-PCI Card slot or the CDC slot as shown below.

The applied wireless cards are:

- IBM 11a/b/g Wireless LAN Mini PCI Adapter, "IC: 349E-PH12127E"
- IBM 11b/g Wireless LAN Mini PCI Adapter, "IC: 349E-T60H78"
- Intel PRO/Wireless LAN 2100 3B Mini PCI Adapter, "IC: 349E-WM3B2100"
- IBM Integrated *Bluetooth* III with 56K Modem, "IC: 349E-BMDC200"

For information concerning the wireless cards announced after the publication of this notice, visit the Web site at www.ibm.com/pc/qtechinfo/MIGR-43693.html



Attention for the authentication mechanism

You can install or remove each wireless feature by yourself. If you install an unauthorized wireless adapter that is not approved for use with the ThinkPad X40 Series computer, the computer does not start, but only displays an error message and emits beeps.

Low power license-exempt radiocommunication devices (RSS-210)

a. 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.

b. Operation in 5 GHz 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)

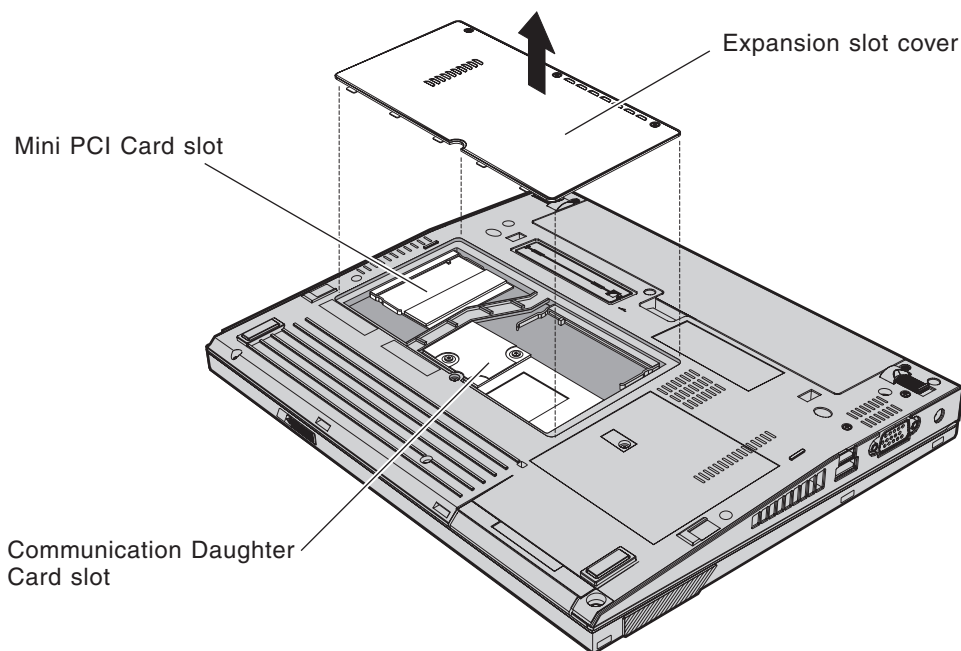
ThinkPad X40 Series computers employ low gain integral antennas that do not emit RF field in excess of Health Canada limits for the general population; consult Safety Code 6, obtainable from Health Canada's Web site at www.hc-sc.gc.ca/rpb

Numéro d'homologation

Le numéro d'homologation d'Industrie Canada pour chaque carte Mini-PCI sans fil homologuée ou carte RF CDC (Communication Daughter Card) est indiqué sur chaque module installé dans l'emplacement Mini-PCI Card ou CDC comme illustré ci-dessous.

Les cartes sans fil applicables sont les suivantes:

- IBM 11a/b/g Wireless LAN Mini PCI Adapter, "IC: 349E-PH12127E"
- IBM 11b/g Wireless LAN Mini PCI Adapter, "IC: 349E-T60H78"
- Intel PRO/Wireless LAN 2100 3B Mini PCI Adapter, "IC: 349E-WM3B2100"
- IBM Integrated *Bluetooth* III avec modem 56K, "IC: 349E-BMDC200"



Remarque relative au mécanisme d'authentification

Vous pouvez installer ou désinstaller tout dispositif sans fil. Si vous installez une carte sans fil qui n'est pas homologuée pour l'ordinateur ThinkPad X40 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 5 GHz

- Tout appareil destiné [aggrave] 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 [aggrave] forte puissance sont désignés comme les utilisateurs principaux (c'est-[aggrave]-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 X40 Series utilise des antennes intégrales [aggrave] 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 [aggrave] l'adresse "www.hc-sc.gc.ca/rpb".