ThinkPad® Z61 Series Regulatory Notice

ThinkPad® Z61 Series Regulatory Notice

First Edition (September 2006)

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Read first — regulatory information

Regulatory notice for ThinkPad Z61 Series

This notice is a supplementary document of the *ThinkPad® Z61 Series Service and Troubleshooting Guide*. Please read this document before you use the ThinkPad Z61 Series computer.

The ThinkPad Z61 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 must install and use your ThinkPad computer in strict accordance with the instructions as described hereafter.

Avis de réglementation pour les ThinkPad Z61 Series

Le présent avis est un document qui vient compléter le *ThinkPad Z61 Series - Guide de maintenance et d'identification des incidents*. Veuillez lire ce document avant d'utiliser l'ordinateur ThinkPad Z61 Series.

L'ordinateur ThinkPad Z61 Series est conforme aux normes de sécurité et de radiofréquence du pays ou de la région où son utilisation sans fil est agréée. Vous devez installer et utiliser votre ordinateur ThinkPad en respectant scrupuleusement les instructions décrites ci-après.

ThinkPad(R) **Z61** 시리즈 규격에 관련된 사항

이 문서는 ThinkPad **Z61** 시리즈 사용 설명서의 보충 설명서입니다.
ThinkPad **Z61** 시리즈 컴퓨터를 사용하기 전에 반드시 이 문서를 읽어 보십시오.

ThinkPad **Z61** 시리즈 컴퓨터는 무선을 사용할 수 있도록 인증된 어떠한 국가 또는 지역에서라도 사용될 수 있도록 전파 형식 등록과 안전 기준에 적합하게 만들어졌습니다.
반드시 사용 설명서에 언급된 지시 사항에 따라 ThinkPad 컴퓨터를 설치하고 사용해야 합니다.

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USA — Federal Communications Commission (FCC)

I. User installable Wireless LAN module

Mini PCI Express Cards:

- FCC ID: PPD-AR5BXB6 (Model: AR5BXB6)
- FCC ID: PD9LEN3945ABG (Model: WM3945ABG)
- FCC ID: PPD-AR5BXB72-L (Model: AR5BXB72)

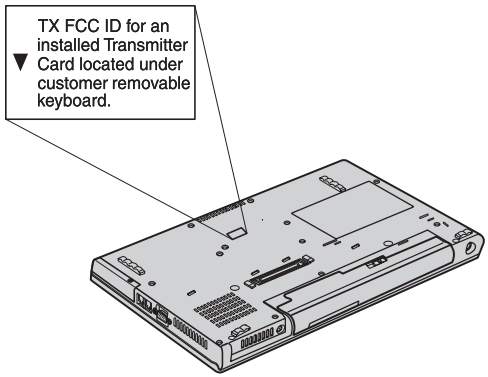
Wireless LAN Mini PCI Express Cards marketed in the USA and Canada do not support nor function in the extended channels (12ch, 13ch).

i) FCC ID of wireless module

There is no FCC ID for Mini PCI Express Card shown on the enclosure of your ThinkPad computer. Instead you will find an indicator pointing to the location of the FCC ID on the bottom side of your ThinkPad computer as shown in the figure below. The FCC ID is affixed on the approved module installed in the Mini PCI Express Card slot.

Models:
- AR5BXB6
- WM3945ABG
- AR5BXB72

ThinkPad Z61t computer



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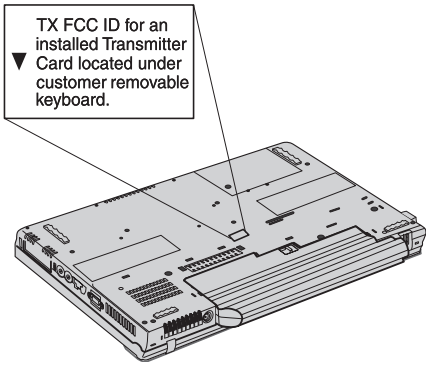
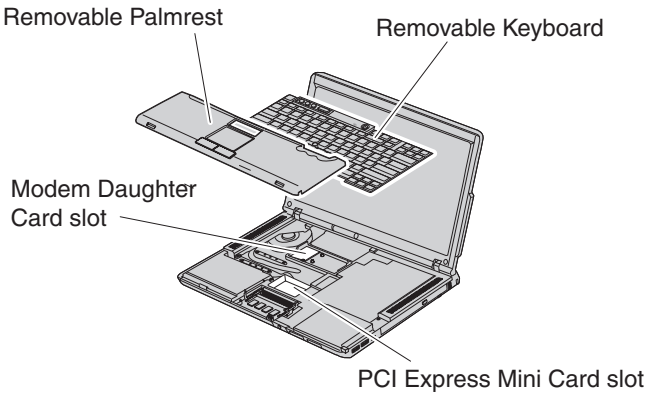
ThinkPad Z61m and Z61e computer



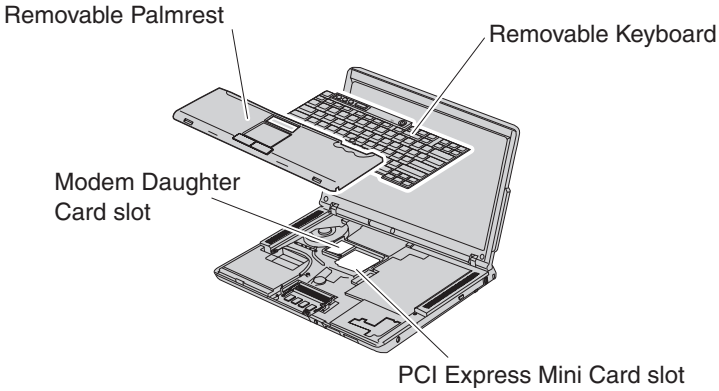
ii) Installation of approved wireless module

If no integrated wireless LAN Mini PCI Express Card has been preinstalled in your ThinkPad computer, you can install one, provided by Lenovo as an option. Plug the wireless card option into the Mini PCI Express Card slot located under the keyboard of your ThinkPad computer as shown below.

ThinkPad Z61t computer



ThinkPad Z61m and Z61e computer



Attention: The ThinkPad Z61 Series computer contains an authentication mechanism
If you install an unauthorized wireless LAN Mini PCI Express Card that is not approved for use in the ThinkPad Z61 Series computer, the computer will not start, but only displays an error message and emits beeps.

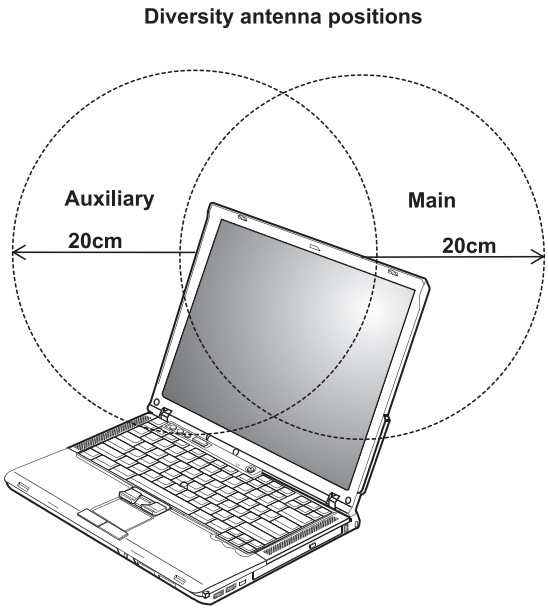
iii) The FCC RF safety requirement

The radiated output power of the Wireless LAN Mini PCI Express Card authorized to use for the ThinkPad Z61 Series computer is far below the FCC radio frequency exposure limits. Nevertheless, the ThinkPad Z61 Series computer shall be used in such a manner that the potential for human contact during normal operation is minimized as follows:

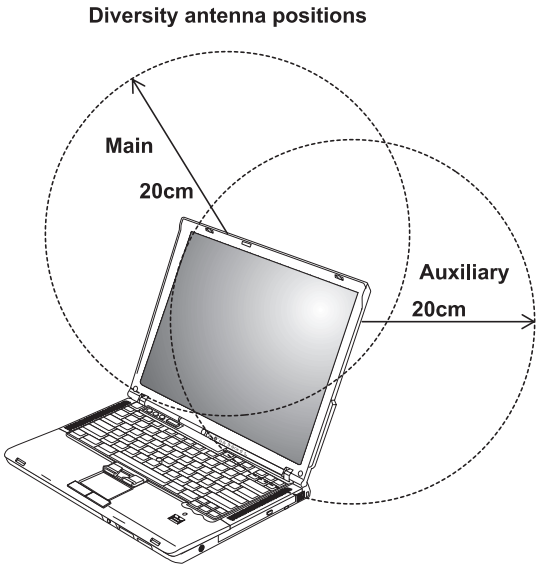
Caution: To comply with FCC RF exposure compliance requirements, a separation distance of at least 20 cm (8 inches) must be maintained between the antenna for the integrated Wireless LAN Mini PCI Express Card built in to the screen section and all persons. You are not allowed to disable "standby mode" 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.

Models:
- AR5BXB6
- WM3945ABG
- AR5BXB72

ThinkPad Z61t computer



ThinkPad Z61m and Z61e computer



Note: The transmission diversity function is implemented for the cards. 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.

iv) Radio Frequency interference requirements

- The devices have been tested and found to comply with the limits for a Class B digital device pursuant to FCC Part 15 Subpart B. The models AR5BXB6 and AR5BXB72 were subject to DoC. Refer to "Electronic emission notices" on page 17.
  The model WM3945ABG underwent the certification process, thus FCC ID PD9LEN3945ABG for model WM3945ABG includes all compliances of Part 15 Subpart B, C, and E.
- Each device is restricted to indoor use due to its operation in the 5.15 to 5.25 GHz frequency range. FCC requires these products 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.

II. Pre-installed integrated Bluetooth module

- FCC ID: MCLJ07H081 (Model: J07H081)

The Model: J07H081 has been tested and found to comply with the limits for both a Class B digital device regarding FCC Part 15 Subpart B and an intentional radiator regarding FCC Part 15 Subpart C; then it underwent certification processes for both rules. Thus the FCC ID: MCLJ07H081 of this device includes both compliances for Part 15 Subpart B and C.

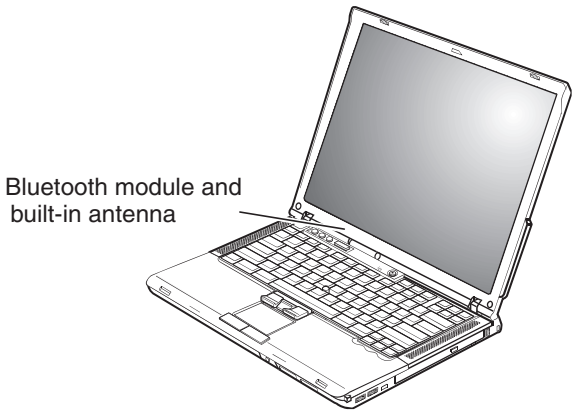
i) FCC ID and installation of the module

If you find the FCC ID "MCLJ07H081" on the label at the bottom side of your computer, your computer integrates the Bluetooth transmitter module (Model: J07H081). The Bluetooth module is preinstalled by Lenovo, and is not removable by users. If your card requires replacement via the proper steps shown in "Chapter 8. Getting help and service" of the *ThinkPad Z61 Series Service and Troubleshooting Guide*, Lenovo will request you to send your computer with the card to Lenovo so that Lenovo will repair it.

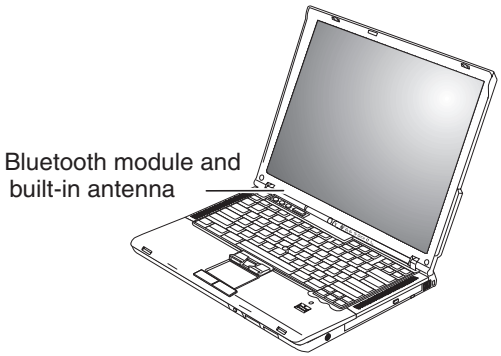
ii) The FCC RF safety requirement

The Bluetooth module "J07H081" and its built-in antenna are located near the left hinge of the computer lid. The radiated output power of the Bluetooth module is far below the FCC radio frequency exposure limits. Therefore, a 20 cm of separation between the Bluetooth antenna and human body is not required.

ThinkPad Z61t computer



ThinkPad Z61m and Z61e computer



III. Simultaneous use of RF transmitters

Your ThinkPad computer is approved for simultaneous use of the transmitters listed below:

- Wireless LAN adapter (FCC ID: PPD-AR5BXB6, PPD-AR5BXB72-L, or PD9LEN3945ABG)
- Bluetooth module (FCC ID: MCLJ07H081)

Please make sure of the following conditions on use of these wireless features:

1. When you use any other RF option device, all other wireless features including the above integrated devices in your ThinkPad computer are required to be turned off.
2. Users must follow the RF Safety instructions on wireless option devices that are included in the RF option device's user's manual.

Canada — Industry Canada (IC)

IC Certification number

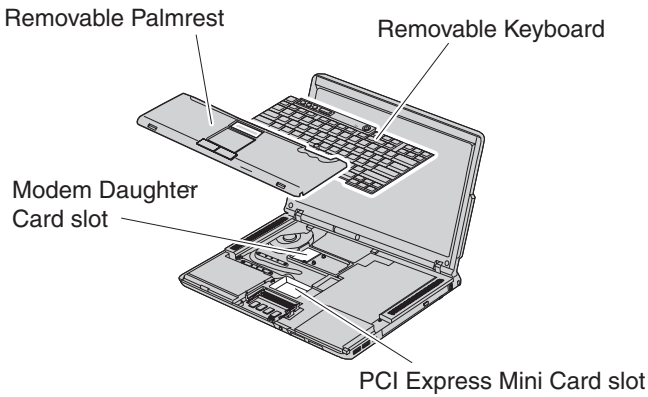
I) User installable Wireless LAN modules

- IC: 4104A-AR5BXB6 (Model: AR5BXB6)
- IC: 1000M-LEN3945 (Model: WM3945ABG)
- IC: 4104A-ARBXB72L (Model: AR5BXB72)

Wireless LAN Mini PCI Express Cards marketed in the USA and Canada do not support nor function in the extended channels (12ch, 13ch).

The certification number of Industry Canada for the approved Mini PCI Express wireless card is affixed on the module installed in the Mini PCI Express Card slot as shown below.

ThinkPad Z61t computer



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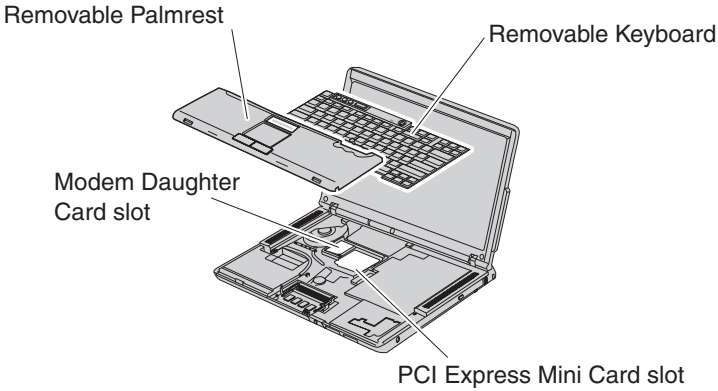
ThinkPad Z61m and Z61e computer



Attention: The ThinkPad Z61 Series computer contains an 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 in the ThinkPad Z61 Series computer, the computer will not start, but only displays an error message and emits beeps.

II) Pre-installed integrated Bluetooth module

- IC: 2878D-J07H081 (Model: J07H081)

If you find an indication “Contains Transmitter Module: Canada IC: 2878D-J07H081” on the label at the bottom side of your computer, your computer integrates the Bluetooth transmitter module. The Bluetooth module is preinstalled by Lenovo, and is not removable by users. If your card requires replacement via the proper steps shown in “Chapter 8. Getting help and service” of the *ThinkPad Z61 Series Service and Troubleshooting Guide*, Lenovo will request you to send your computer with the card to Lenovo so that Lenovo will repair it.

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

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.

The transmitter devices have been designed to operate with the antennas integrated in ThinkPad Z61 Series, and having a maximum gain of within 3 dBi.

The maximum antenna gain permitted for devices in the 5250-5350 MHz and 5725-5785 MHz bands complies with the e.i.r.p. limit in section A9.2(3) of RSS-210.

When you use the model AR5BXB6, AR5BXB72, or WM3945ABG:

- The devices for the band 5150–5250 MHz are 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 Z61 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 IC

I) Module sans fil installable par l'utilisateur

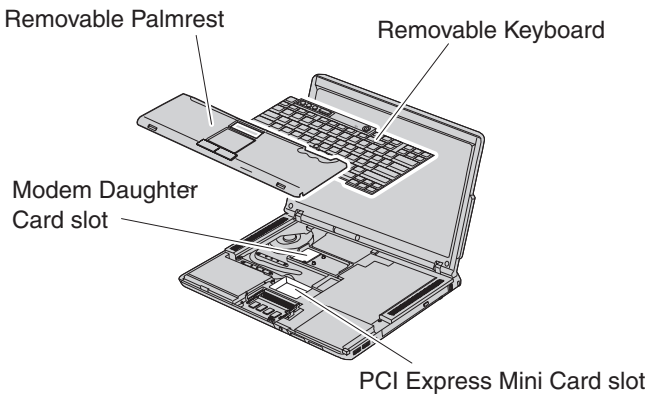
Les cartes Express mini-PCI de réseau local sans fil:

- IC: 4104A-AR5BXB6 (Modèle: AR5BXB6)
- IC: 1000M-LEN3945 (Modèle: WM3945ABG)
- IC: 4104A-ARBXB72L (Modèle: AR5BXB72)

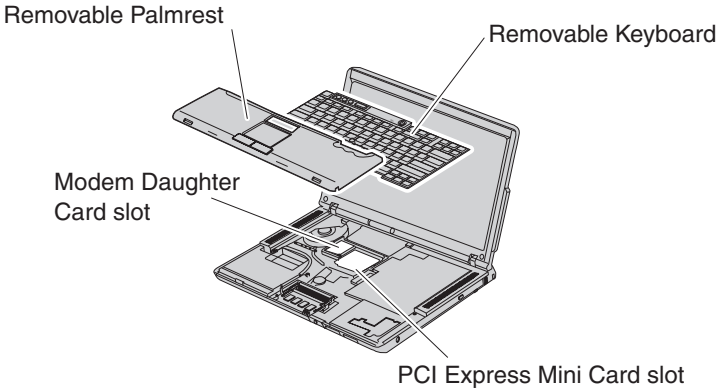
Les cartes de réseau local sans fil Express mini-PCI commercialisées aux Etats-Unis et au Canada ne prennent pas en charge les canaux étendus (12ch, 13ch) et ne fonctionnent donc pas sur de tels canaux.

Le numéro d'homologation d'Industrie Canada pour le carte sans fil Express mini-PCI homologuée est indiqué sur le module installé dans l'emplacement réservé à la carte Express mini-PCI, comme illustré ci-dessous.

L'ordinateur ThinkPad Z61t



L'ordinateur ThinkPad Z61m/Z61e



Attention: L'ordinateur ThinkPad Z61 Series contient un 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 Z61 Series, l'ordinateur ne démarrera pas; un message d'erreur sera affiché et des bips sonores seront émis.

II) Module Bluetooth intégré préinstallé

- IC : 2878D-J07H081 (Modèle : J07H081)

Si la mention "Contains Transmitter Module: Canada IC: 2878D-J07H081" figure sur l'étiquette située au bas de votre ordinateur, cela signifie que ce dernier intègre le module de transmission Bluetooth. Le module Bluetooth est préinstallé par Lenovo et ne peut pas être retiré par les utilisateurs. Si votre carte doit être remplacée conformément aux étapes du Chapitre 8 relatif à l'aide et la maintenance dans le manuel *ThinkPad Z61 Series - Guide de maintenance et d'identification des incidents*, Lenovo vous demandera de lui envoyer votre ordinateur accompagné de la carte pour réparation.

Remarque relative aux appareils de communication radio de faible puissance sans licence (CNR-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.

Lorsque vous utilisez le modèle AR5BXB6, AR5BXB72, ou WM3945ABG:

- 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) (CNR-102)

Le ThinkPad Z61 Series utilise des antennes intégrales à faible gain qui n'émettent pas un champ électromagnétique supérieur aux normes imposées par le Ministére de la santé canadien pour la population. Consultez le Safety Code 6 sur le site Web du Ministére de la santé canadien à l'adresse "www.hc-sc.gc.ca/rpb".

Electronic emission notices

Federal Communications Commission (FCC) Statement

- Model: AR5BXB6
- Model: AR5BXB72

Note: The compliances of the FCC Part 15 Subpart B for models WM3945ABG and J07H081 were proceeded by certification under each respective FCC ID: PD9LEN3945ABG and MCLJ07H081.

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, which 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 measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult an authorized dealer or service representative for help.

Lenovo is not responsible for any radio or television interference caused by unauthorized changes or modifications to this equipment. Unauthorized changes or modifications could void the user's authority to operate the equipment.

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.

Responsible Party:
Lenovo (United States) Inc.
One Manhattanville Road
Purchase, New York 10577

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Telephone: (919) 254-0532

Tested To Comply
With FCC Standards

FOR HOME OR OFFICE USE

Industry Canada Class B Emission Compliance Statement
This Class B digital apparatus complies with Canadian ICES-003.

Avis de conformité à la réglementation d'Industrie Canada
Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

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. This equipment complies with Part 68 of the FCC rules and the requirements adopted by the ACTA. On this equipment is a label that contains, among other information, a product identifier in the format US:AAAEQ##TXXXX. If requested, this number must be provided to the telephone company.
3. The REN is used to determine the number of devices that may be connected to a telephone line. Excessive RENs on a telephone line may result in the devices not ringing in response to an incoming call. In most but not all areas, the sum of RENs should not exceed five (5.0). To be certain of the number of devices that may be connected to a line, as determined by the total RENs, contact the local telephone company. The REN for this product is part of the product identifier that has the format US:AAAEQ##TXXXX. The digits represented by ## are the REN without a decimal point (e.g., 03 is a REN of 0.3).
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 Lenovo Authorized Seller, or the Customer Support Center. For the most current phone numbers, go to http://www.lenovo.com/think/support and click Support phone list. The telephone company may ask you to disconnect

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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 Lenovo Authorized Seller, or the Customer Support Center. For the most current phone numbers, go to http://www.lenovo.com/think/support and click Support phone list.
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.
10. A plug and jack used to connect this equipment to the premises wiring and telephone network must comply with the applicable FCC Part 68 rules and requirements adopted by the ACTA. A compliant telephone cord and modular plug is provided with this product. It is designed to be connected to a compatible modular jack that is also compliant. See installation instructions for details.
11. If your home has specially wired alarm equipment connected to the telephone line, ensure the installation of this Data/Fax Modem does not disable your alarm equipment. If you have questions about what will disable alarm equipment, consult your telephone company or a qualified installer.
12. The software contained in this Data/Fax Modem to allow user access to the network must be upgraded to recognize newly established network area codes and exchange codes as they are placed into service.

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.

Before installing this equipment, users should ensure that it is permissible to be connected to the facilities of the local telecommunications company. The equipment must also be installed using an acceptable method of communication. In some cases, the company's inside wiring associated with a single line individual service may be extended by means of a certified connector assembly (telephone extension cord). The customer should be aware that compliance with the above conditions may not prevent degradation of service in some situations.

Repairs to certified equipment should be made by an authorized Canadian maintenance facility designated by the supplier. Any repairs of alterations made by the user to this equipment, or equipment malfunctions, may give the telecommunications company cause to request the user to disconnect the equipment.

Users should ensure for their own protection that the electrical ground connections of the power utility, telephone lines and internal metallic water pipe system, if present, are connected together. This precaution may be particularly important in rural areas.

Caution
Users should not attempt to make such connections themselves, but should contact the appropriate electric inspection authority, or electrician, as appropriate.

The Ringer Equivalence Number (REN) for the terminal equipment RD02-D110 is 0.1. 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 the sum of the Ringer Equivalence Numbers of all the devices does not exceed five.

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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.

Avant d'installer ce matériel, l'utilisateur doit s'assurer qu'il est permis de le raccorder aux installations de l'entreprise locale de télécommunication. Le matériel doit également être installé en suivant une méthode acceptée de raccordement. Dans certains cas, les fils intérieurs de l'entreprise utilisés pour un service individuel à ligne unique peuvent être prolongés au moyen d'un dispositif homologué de raccordement (cordon prolongateur téléphonique interne). L'abonné ne doit pas oublier qu'il est possible que la conformité aux conditions énoncées ci-dessus n'empechent pas la dégradation du service dans certaines situations. Actuellement, les entreprises de télécommunication ne permettent pas que l'on raccorde leur matériel à des jacks d'abonné, sauf dans les cas précis prévus par les tarifs paticuliers de ces entreprises.

Les réparations de matériel homologué doivent être effectuées par un centre d'entretien canadien autorisé désigné par le fournisseur. La compagnie de télécommunications peut demander à l'utilisateur de débrancher un appareil à la suite de réparations ou de modifications effectuées par l'utilisateur ou à cause de mauvais fonctionnement.

Pour sa propre protection, l'utilisateur doit s'assurer que tous les fils de mise à la terre de la source d'énergie électrique, des lignes téléphoniques et des canalisations d'eau métalliques, s'il y en a, sont raccordés ensemble. Cette précaution est particulièrement importante dans les régions rurales.

Avertissement
L'utilisateur ne doit pas tenter de faire ces raccordements lui-même; il doit avoir recours à un service d'inspection des installations électriques, ou à électricien, selon le cas.

L'indice d'équivalence de la sonnerie (IES) du présent matériel RD02-D110 est de 0.1. 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.

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