

## ■ ■ Lenovo regulatory notice for wireless adapters

This manual contains regulatory information for the following Lenovo products.

- Lenovo Yoga 2 11

The following wireless modules are supported on Lenovo Yoga 2 11:

- BCM943142HM
- QCWB335

### ■ Read first — regulatory information

Please read this document before you use the Lenovo computer. Lenovo 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 computer in strict accordance with the instructions as described hereafter.

Veuillez lire ce document avant d'utiliser l'ordinateur Lenovo. L'ordinateur Lenovo 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 en respectant scrupuleusement les instructions décrites ci-après.

### ■ USA — Federal Communications Commission (FCC)

#### I. Factory preinstalled Wireless LAN module

- FCC ID: QDS-BRCM1063 (Model: BCM943142HM)
- FCC ID: PPD-QCWB335 (Model: QCWB335)

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

#### i) The FCC RF Exposure compliance:

The radiated output power of the Wireless LAN Mini PCI Express Card authorized to use for the your Lenovo computer is far below the FCC radio frequency exposure limits.

Nevertheless, it shall be used in such a manner that the potential for human contact during normal operation is minimized as follows:

**Note:** The transmission diversity function is implemented for this product. For WLAN cards (Model: BCM943142HM, QCWB335) using Main and Auxiliary antennas for transmission in the IEEE 802.11 b/g/n transmission mode, radio frequency energy is not emitted simultaneously from both Main and Auxiliary antennas. One of the antennas is selected automatically or manually (by users) to have good quality of radiocommunication (transmission diversity function). For WLAN cards BCM943142HM, QCWB335 in the IEEE 802.11 b/g/n, or MIMO (Multiple In Multiple Out ) transmission mode, the radio frequency energy is emitted from Main antenna.

#### ii) FCC ID of wireless module:

On the bottom side of your Lenovo computer, you will find an indicator label of the format "Contains Transmitter Module: FCC ID XXXX", where XXXX represents the FCC ID that corresponds to your preinstalled Wireless LAN module.

**iii) Radio Frequency interference requirement:**

Each device has been tested and found to comply with the limits for a Class B digital device pursuant to FCC Part 15 Subpart B. Refer to "Electronic emission notices" on page 5.

The models BCM94330UARTSDB underwent the certification process with each respective FCC ID number listed in "1. Factory preinstalled Wireless LAN module" on page 1.

**II. Simultaneous use of RF transmitters**

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

1. When you use any other RF option device, all wireless features in your Lenovo 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) Factory preinstalled Wireless LAN modules:**

- IC: 4324A-BRCM1063 (Model: BCM943142HM)
- IC: 4104A-QCWB335 (Model: QCWB335)

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

There is no certification number of Industry Canada for Mini PCI Express Card shown on the enclosure of your Lenovo computer. Instead you will find an indicator label pointing to the location of the IC Certification number on the bottom side of your Lenovo computer. This label will be of the format "Contains Transmitter Module: Canada IC: XXXX", where XXXX represents the IC ID that corresponds to your preinstalled WLAN module.

#### **II) Low power license-exempt radiocommunication devices (RSS-210):**

This device complies with Industry Canada licence-exempt RSS standard(s).

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 Lenovo computer, and having a maximum gain of within 3 dBi.

#### **III) Exposure of humans to RF fields (RSS-102):**

Lenovo 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](http://www.hc-sc.gc.ca/rpb)

The radiated energy from the antennas connected to the wireless adapters conforms to the IC limit of the RF exposure requirement regarding IC RSS-102, Issue 2 clause 4.2.

## **Numéro d'homologation IC**

### **I) Modules de réseaux local sans fil pré-installé à l'usine:**

- IC: 4324A-BRCM1063 (Model: BCM943142HM)
- IC: 4104A-QCWB335 (Model: QCWB335)

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 boîtier de votre ordinateur Lenovo ne comporte pas de numéro d'homologation IC (Industry Canada) pour la carte mini-PCI Express ; mais sous votre Lenovo, vous trouverez une étiquette indicatrice pointant vers l'emplacement du numéro d'homologation IC. L'étiquette se présente sous la forme "Contains Transmitter Module: Canada IC: XXXX" où XXXX représente l'ID IC qui correspond au module WLAN préinstallé.

### **II) Remarque relative aux appareils de communication radio de faible puissance sans licence (CNR-210):**

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence.

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.

Les périphériques d'émission sont conçus pour fonctionner avec des antennes intégrées aux Lenovo et ayant un gain maximal de moins de 3 dBi.

### **III) Exposition des êtres humains aux champs radioélectriques (RF) (CNR-102):**

L'ordinateur Lenovo 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](http://www.hc-sc.gc.ca/rpb)".

L'énergie émise par les antennes reliées aux adaptateurs sans fil respecte la limite d'exposition aux radiofréquences telle que définie par Industrie Canada dans la clause 4.2 du document CNR-102.

Le gain d'antenne maximal autorisé pour les appareils dans les bandes de fréquence 5250-5350 MHz, 5470-5725 MHz et 5725-5825 MHz est conforme à la limite p.i.e (puissance isotrope rayonnée équivalente) définie dans la section A9.2 du CNR-210.

Lorsque vous utilisez une carte de réseau local sans fil dans le mode de transmission 802.11 a/n:

- Les appareils destinés à la bande 5150-5250 MHz devront être exclusivement utilisés 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.

## ■ Electronic emission notices

### **Federal Communications Commission (FCC) Statement**

- BCM943142HM
- QCWB335

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) Incorporated  
1009 Think Place - Building One  
Morrisville, NC 27560  
Telephone: 1-919-294-5900



### **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.

This device has been tested and meets the FCC RF exposure guidelines.  
The maximum SAR value reported is 1.30W/kg.



P/N: XXXXXXXXXX  
Rev. AA00

## Lenovo limited warranty

### L505-0010-02 08/2011

This Lenovo Limited Warranty consists of the following parts:

**Part 1 - General Terms**

**Part 2 - Country-specific Terms**

**Part 3 - Warranty Service Information**

The terms of **Part 2** replace or modify terms of **Part 1** as specified for a particular country.

### ■ ■ Part 1 - General Terms

This Lenovo Limited Warranty applies only to Lenovo hardware products you purchased for your own use and not for resale.

This Lenovo Limited Warranty is available in other languages at [www.lenovo.com/warranty](http://www.lenovo.com/warranty).

### ■ What this Warranty Covers

Lenovo warrants that each Lenovo hardware product that you purchase is free from defects in materials and workmanship under normal use during the warranty period. The warranty period for the product starts on the original date of purchase as shown on your sales receipt or invoice or as may be otherwise specified by Lenovo. The warranty period and type of warranty service that apply to your product are as specified in "**Part 3 - Warranty Service Information**" below. This warranty only applies to products in the country or region of purchase.

**THIS WARRANTY IS YOUR EXCLUSIVE WARRANTY AND REPLACES ALL OTHER WARRANTIES OR CONDITIONS, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTIES OR CONDITIONS OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. AS SOME STATES OR JURISDICTIONS DO NOT ALLOW THE EXCLUSION OF EXPRESS OR IMPLIED WARRANTIES, THE ABOVE EXCLUSION MAY NOT APPLY TO YOU. IN THAT EVENT, SUCH WARRANTIES APPLY ONLY TO THE EXTENT AND FOR SUCH DURATION AS REQUIRED BY LAW AND ARE LIMITED IN DURATION TO THE WARRANTY PERIOD. AS SOME STATES OR JURISDICTIONS DO NOT ALLOW LIMITATIONS ON THE DURATION OF AN IMPLIED WARRANTY, THE ABOVE LIMITATION ON DURATION MAY NOT APPLY TO YOU.**

### ■ How to Obtain Warranty Service

If the product does not function as warranted during the warranty period, you may obtain warranty service by contacting Lenovo or a Lenovo approved Service Provider. A list of approved Service Providers and their telephone numbers is available at:

[www.lenovo.com/support/phone](http://www.lenovo.com/support/phone).

Warranty service may not be available in all locations and may differ from location to location. Charges may apply outside a Service Provider's normal service area. Contact a local Service Provider for information specific to your location.

### ■ Customer Responsibilities for Warranty Service

Before warranty service is provided, you must take the following steps:

- follow the service request procedures specified by the Service Provider

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- backup or secure all programs and data contained in the product
- provide the Service Provider with all system keys or passwords
- provide the Service Provider with sufficient, free, and safe access to your facilities to perform service
- remove all data, including confidential information, proprietary information and personal information, from the product or, if you are unable to remove any such information, modify the information to prevent its access by another party or so that it is not personal data under applicable law. The Service Provider shall not be responsible for the loss or disclosure of any data, including confidential information, proprietary information, or personal information, on a product returned or accessed for warranty service
- remove all features, parts, options, alterations, and attachments not covered by the warranty
- ensure that the product or part is free of any legal restrictions that prevent its replacement
- if you are not the owner of a product or part, obtain authorization from the owner for the Service Provider to provide warranty service

### ■ What Your Service Provider Will Do to Correct Problems

When you contact a Service Provider, you must follow the specified problem determination and resolution procedures.

The Service Provider will attempt to diagnose and resolve your problem by telephone, e-mail or remote assistance. The Service Provider may direct you to download and install designated software updates.

Some problems may be resolved with a replacement part that you install yourself called a "Customer Replaceable Unit" or "CRU." If so, the Service Provider will ship the CRU to you for you to install.

If your problem cannot be resolved over the telephone; through the application of software updates or the installation of a CRU, the Service Provider will arrange for service under the type of warranty service designated for the product under "**Part 3 - Warranty Service Information**" below.

If the Service Provider determines that it is unable to repair your product, the Service Provider will replace it with one that is at least functionally equivalent.

If the Service Provider determines that it is unable to either repair or replace your product, your sole remedy under this Limited Warranty is to return the product to your place of purchase or to Lenovo for a refund of your purchase price.

### ■ Replacement Products and Parts

When warranty service involves the replacement of a product or part, the replaced product or part becomes Lenovo's property and the replacement product or part becomes your property. Only unaltered Lenovo products and parts are eligible for replacement. The replacement product or part provided by Lenovo may not be new, but it will be in good working order and at least functionally equivalent to the original product or part. The replacement product or part shall be warranted for the balance of the period remaining on the original product.

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### ■ Use of Personal Contact Information

If you obtain service under this warranty, you authorize Lenovo to store, use and process information about your warranty service and your contact information, including name, phone numbers, address, and e-mail address. Lenovo may use this information to perform service under this warranty. We may contact you to inquire about your satisfaction with our warranty service or to notify you about any product recalls or safety issues. In accomplishing these purposes, you authorize Lenovo to transfer your information to any country where we do business and to provide it to entities acting on our behalf. We may also disclose it where required by law. Lenovo's privacy policy is available at [www.lenovo.com/](http://www.lenovo.com/).

### ■ What this Warranty Does not Cover

This warranty does not cover the following:

- uninterrupted or error-free operation of a product
- loss of, or damage to, your data by a product
- any software programs, whether provided with the product or installed subsequently
- failure or damage resulting from misuse, abuse, accident, modification, unsuitable physical or operating environment, natural disasters, power surges, improper maintenance, or use not in accordance with product information materials
- damage caused by a non-authorized service provider
- failure of, or damage caused by, any third party products, including those that Lenovo may provide or integrate into the Lenovo product at your request
- any technical or other support, such as assistance with "how-to" questions and those regarding product set-up and installation
- products or parts with an altered identification label or from which the identification label has been removed

### ■ Limitation of Liability

Lenovo is responsible for loss or damage to your product only while it is in the Service Provider's possession or in transit, if the Service Provider is responsible for the transportation. Neither Lenovo nor the Service Provider is responsible for loss or disclosure of any data, including confidential information, proprietary information, or personal information, contained in a product.

**UNDER NO CIRCUMSTANCES, AND NOTWITHSTANDING THE FAILURE OF ESSENTIAL PURPOSE OF ANY REMEDY SET FORTH HEREIN, SHALL LENOVO, ITS AFFILIATES, SUPPLIERS, RESELLERS, OR SERVICE PROVIDERS BE LIABLE FOR ANY OF THE FOLLOWING EVEN IF INFORMED OF THEIR POSSIBILITY AND REGARDLESS OF WHETHER THE CLAIM IS BASED IN CONTRACT, WARRANTY, NEGLIGENCE, STRICT LIABILITY OR OTHER THEORY OF LIABILITY: 1) THIRD PARTY CLAIMS AGAINST YOU FOR DAMAGES; 2) LOSS, DAMAGE OR DISCLOSURE OF YOUR DATA; 3) SPECIAL, INCIDENTAL, PUNITIVE, INDIRECT OR CONSEQUENTIAL DAMAGES, INCLUDING BUT NOT LIMITED TO LOST PROFITS, BUSINESS REVENUE, GOODWILL OR ANTICIPATED SAVINGS. IN NO CASE SHALL THE TOTAL LIABILITY OF LENOVO, ITS AFFILIATES, SUPPLIERS, RESELLERS OR SERVICE PROVIDERS FOR DAMAGES FROM ANY CAUSE EXCEED THE AMOUNT OF ACTUAL DIRECT DAMAGES, NOT TO EXCEED THE AMOUNT PAID FOR THE PRODUCT.**

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THE FOREGOING LIMITATIONS DO NOT APPLY TO DAMAGES FOR BODILY INJURY (INCLUDING DEATH), DAMAGE TO REAL PROPERTY OR DAMAGE TO TANGIBLE PERSONAL PROPERTY FOR WHICH LENOVO IS LIABLE UNDER LAW. AS SOME STATES OR JURISDICTIONS DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, THE ABOVE LIMITATION OR EXCLUSION MAY NOT APPLY TO YOU.

### ■ Your Other Rights

THIS WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS. YOU MAY HAVE OTHER RIGHTS ACCORDING TO THE APPLICABLE LAWS OF YOUR STATE OR JURISDICTION. YOU MAY ALSO HAVE OTHER RIGHTS UNDER A WRITTEN AGREEMENT WITH LENOVO. NOTHING IN THIS WARRANTY AFFECTS STATUTORY RIGHTS, INCLUDING RIGHTS OF CONSUMERS UNDER LAWS OR REGULATIONS GOVERNING THE SALE OF CONSUMER GOODS THAT CANNOT BE WAIVED OR LIMITED BY CONTRACT.

## ■ ■ Part 2 - Country-specific Terms

### Australia

"Lenovo" means Lenovo (Australia & New Zealand) Pty Limited ABN 70 112 394 411. Address: Level 10, North Tower, 1-5 Railway Street, Chatswood, NSW, 2067. Telephone: +61 2 8003 8200. Email: lensyd\_au@lenovo.com

*The following replaces the same section in Part 1:*

### ■ What this Warranty Covers:

Lenovo warrants that each hardware product that you purchase is free from defects in materials and workmanship under normal use and conditions during the warranty period. If the product fails due to a covered defect during the warranty period, Lenovo will provide you a remedy under this Limited Warranty. The warranty period for the product starts on the original date of purchase specified on your sales receipt or invoice unless Lenovo informs you otherwise in writing. The warranty period and type of warranty service that apply to your product are set forth below in **Part 3 - Warranty Service Information**.

**THE BENEFITS GIVEN BY THIS WARRANTY ARE IN ADDITION TO YOUR RIGHTS AND REMEDIES AT LAW, INCLUDING THOSE UNDER THE AUSTRALIAN CONSUMER LAW.**

*The following replaces the same section in Part 1:*

### ■ Replacement Products and Parts:

When warranty service involves the replacement of a product or part, the replaced product or part becomes Lenovo's property and the replacement product or part becomes your property. Only unaltered Lenovo products and parts are eligible for replacement. The replacement product or part provided by Lenovo may not be new, but it will be in good working order and at least functionally equivalent to the original product or part. The replacement product or part shall be warranted for

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the balance of the period remaining on the original product. Products and parts presented for repair may be replaced by refurbished products or parts of the same type rather than being repaired. Refurbished parts may be used to repair the product; and repair of the product may result in loss of data, if the product is capable of retaining user-generated data.

*The following is added to the same section in Part 1:*

### ■ Use of Personal Contact Information:

Lenovo will not be able to perform our service under this warranty if you refuse to provide your information or do not wish us to transfer your information to our agent or contractor. You have the right to access your personal contact information and request correction of any errors in it pursuant to the Privacy Act 1988 by contacting Lenovo.

*The following replaces the same section in Part 1:*

### ■ Limitation of Liability:

Lenovo is responsible for loss or damage to your product only while it is in the Service Provider's possession or in transit, if the Service Provider is responsible for the transportation. Neither Lenovo nor the Service Provider is responsible for loss or disclosure of any data, including confidential information, proprietary information, or personal information, contained in a product.

TO THE EXTENT PERMITTED BY LAW, UNDER NO CIRCUMSTANCES AND NOTWITHSTANDING THE FAILURE OF ESSENTIAL PURPOSE OF ANY REMEDY SET FORTH HEREIN, SHALL LENOVO, ITS AFFILIATES, SUPPLIERS, RESELLERS, OR SERVICE PROVIDERS BE LIABLE FOR ANY OF THE FOLLOWING EVEN IF INFORMED OF THEIR POSSIBILITY AND REGARDLESS OF WHETHER THE CLAIM IS BASED IN CONTRACT, WARRANTY, NEGLIGENCE, STRICT LIABILITY OR OTHER THEORY OF LIABILITY: 1) THIRD PARTY CLAIMS AGAINST YOU FOR DAMAGES; 2) LOSS, DAMAGE OR DISCLOSURE OF YOUR DATA; 3) SPECIAL, INCIDENTAL, PUNITIVE, INDIRECT OR CONSEQUENTIAL DAMAGES, INCLUDING BUT NOT LIMITED TO LOST PROFITS, BUSINESS REVENUE, GOODWILL OR ANTICIPATED SAVINGS. IN NO CASE SHALL THE TOTAL LIABILITY OF LENOVO, ITS AFFILIATES, SUPPLIERS, RESELLERS OR SERVICE PROVIDERS FOR DAMAGES FROM ANY CAUSE EXCEED THE AMOUNT OF ACTUAL DIRECT DAMAGES, NOT TO EXCEED THE AMOUNT PAID FOR THE PRODUCT. THE FOREGOING LIMITATIONS DO NOT APPLY TO DAMAGES FOR BODILY INJURY (INCLUDING DEATH), DAMAGE TO REAL PROPERTY OR DAMAGE TO TANGIBLE PERSONAL PROPERTY FOR WHICH LENOVO IS LIABLE UNDER LAW.

*The following replaces the same section in Part 1:*

### ■ Your Other Rights:

THIS WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS. YOU ALSO HAVE OTHER RIGHTS AT LAW, INCLUDING UNDER THE AUSTRALIAN CONSUMER LAW. NOTHING IN THIS WARRANTY AFFECTS STATUTORY RIGHTS OR RIGHTS AT LAW, INCLUDING RIGHTS THAT CANNOT BE WAIVED OR LIMITED BY CONTRACT.

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For example, our products come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the products repaired or replaced if the products fail to be of acceptable quality and the failure does not amount to a major failure.

### New Zealand

*The following is added to the same section in Part 1:*

#### ■ Use of Personal Information:

Lenovo will not be able to perform our service under this warranty if you refuse to provide your information or do not wish us to transfer your information to our agent or contractor. You have the right to access your personal information and request correction of any errors in it pursuant to the Privacy Act 1993 by contacting Lenovo (Australia & New Zealand) Pty Limited ABN 70 112 394 411. Address: Level 10, North Tower, 1-5 Railway Street, Chatswood, NSW, 2067. Telephone: 61 2 8003 8200. Email: lensyd\_au@lenovo.com

### Bangladesh, Cambodia, India, Indonesia, Nepal, Philippines, Vietnam and Sri Lanka

*The following is added to Part 1:*

#### ■ Dispute Resolution

Disputes arising out of or in connection with this warranty shall be finally settled by arbitration held in Singapore. This warranty shall be governed, construed and enforced in accordance with the laws of Singapore, without regard to conflict of laws. If you acquired the product in India, disputes arising out of or in connection with this warranty shall be finally settled by arbitration held in Bangalore, India. Arbitration in Singapore shall be held in accordance with the Arbitration Rules of Singapore International Arbitration Center ("SIAC Rules") then in effect. Arbitration in India shall be held in accordance with the laws of India then in effect. The arbitration award shall be final and binding on the parties without appeal. Any award shall be in writing and set forth the findings of fact and the conclusions of law. All arbitration proceedings, including all documents presented in such proceedings shall be conducted in the English language. The English language version of this warranty prevails over any other language version in such proceedings.

#### ■ European Economic Area (EEA)

*The following is added to Part 1:*

Customers in the EEA may contact Lenovo at the following address: EMEA Service Organisation, Lenovo (International) B.V., Floor 2, Einsteinova 21, 851 01, Bratislava, Slovakia. Service under this warranty for Lenovo hardware products purchased in EEA countries may be obtained in any EEA country in which the product has been announced and made available by Lenovo.

### Russia

*The following is added to Part 1:*

### Product Service Life

The product service life is four (4) years from the original date of purchase.

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## ■ ■ Part 3 - Warranty Service Information

Product or machine type	Country or region of purchase	Warranty period	Types of warranty service
notebook: 20332, 80CX	Taiwan, Korea	parts and labor - 1 year battery pack - 1 year	3, 4
	Singapore		1, 3, 4
	China (Hong Kong S.A.R.), China (Macau S.A.R.), India, Indonesia, Malaysia, Thailand, Philippines, Vietnam, Bahrain, Kuwait, Oman, Qatar, Egypt, South Africa, Saudi Arabia, UAE, Algeria, Nigeria, Kenya, Sri Lanka		1, 4
	Bosnia-Herzegovina, Croatia, Cyprus, Greece, Macedonia, Romania, Slovenia, Serbia, Poland, Hungary, Slovakia, Bulgaria		
	Argentina, Colombia, Peru, Venezuela, Bolivia, Uruguay, Chile, Paraguay, Ecuador		
	Austria, France, Germany, Iceland, Israel, Ireland, Italy, Latvia, Lithuania, Switzerland, the United Kingdom		1, 3
	Japan, Australia, New Zealand		
	United States of America, Canada		
	Russia, Ukraine, the Republic of Kazakhstan, Belarus, Turkmenistan, Azerbaijan, Georgia		4
	Brazil		
	Mexico		1, 5
	Belgium, Denmark, Estonia, Finland, Luxembourg, Netherlands, Norway, Spain, Sweden, Portugal	parts and labor - 2 years battery pack - 1 year	1, 3
	Turkey, Czech Republic		1, 4

If required, the Service Provider will provide repair or exchange service depending on the type of warranty service specified for your product and the available service. Scheduling of service will depend upon the time of your call, parts availability, and other factors.

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### ■ Types of Warranty Service

#### ① Customer Replaceable Unit ("CRU") Service

Under CRU Service, the Service Provider will ship CRUs to you at its cost for installation by you. CRU information and replacement instructions are shipped with your product and are available from Lenovo at any time upon request. CRUs that are easily installed by you are called "Self-service CRUs". "Optional-service CRUs" are CRUs that may require some technical skill and tools. Installation of Self-service CRUs is your responsibility. You may request that a Service Provider install Optional-service CRUs under one of the other types of warranty service designated for your product. An optional service offering may be available for purchase from a Service Provider or Lenovo under which Self-service CRUs would be installed for you. You may find a list of CRUs and their designation in the publication that was shipped with your product or at [www.lenovo.com/CRUs](http://www.lenovo.com/CRUs). The requirement to return a defective CRU, if any, will be specified in the instructions shipped with a replacement CRU. When return is required: 1) return instructions, a prepaid return shipping label, and a container will be included with the replacement CRU; and 2) you may be charged for the replacement CRU if the Service Provider does not receive the defective CRU from you within thirty (30) days of your receipt of the replacement CRU.

#### ② On-site Service

Under On-Site Service, a Service Provider will either repair or exchange the product at your location. You must provide a suitable working area to allow disassembly and reassembly of the product. Some repairs may need to be completed at a service center. If so, the Service Provider will send the product to the service center at its expense.

#### ③ Courier or Depot Service

Under Courier or Depot Service, your product will be repaired or exchanged at a designated service center, with shipping at the expense of the Service Provider. You are responsible for disconnecting the product and packing it in a shipping container provided to you to return your product to a designated service center. A courier will pick up your product and deliver it to the designated service center. The service center will return the product to you at its expense.

#### ④ Customer Carry-In Service

Under Customer Carry-In Service, your product will be repaired or exchanged after you deliver it to a designated service center at your risk and expense. After the product has been repaired or exchanged, it will be made available to you for collection. If you fail to collect the product, the Service Provider may dispose of the product as it sees fit, with no liability to you.

#### ⑤ Mail-In Service

Under Mail-In Service, your product will be repaired or exchanged at a designated service center after you deliver it at your risk and expense. After the product has been repaired or exchanged, it will be returned to you at Lenovo's risk and expense, unless the Service Provider specifies otherwise.

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### ⑥ Customer Two-Way Mail-In Service

Under Customer Two-Way Mail-In Service, your product will be repaired or exchanged after you deliver it to a designated service center at your risk and expense. After the product has been repaired or exchanged, it will be made available to you for return shipping at your risk and expense. If you fail to arrange return shipment, the Service Provider may dispose of the product as it sees fit, with no liability to you.

### ⑦ Product Exchange Service

Under Product Exchange Service, Lenovo will ship a replacement product to your location. You are responsible for its installation and verification of its operation. The replacement product becomes your property in exchange for the failed product, which becomes the property of Lenovo. You must pack the failed product in the shipping carton in which you received the replacement product and return it to Lenovo. Transportation charges, both ways, shall be at Lenovo's expense. If you fail to use the carton in which the replacement product was received, you may be responsible for any damage to the failed product occurring during shipment. You may be charged for the replacement product if Lenovo does not receive the failed product within thirty (30) days of your receipt of the replacement product.

## Product specific Notices

The notices in this appendix are specific to the product with the given MT number. Notices that are common for most Lenovo products are included in "Appendix A. Notices" of the *Lenovo Safety and General Information Guide*.

### ■ ■ Energy star information



ENERGY STAR® is a joint program of the U.S. Environmental Protection Agency and the U.S. Department of Energy aimed at saving money and protecting the environment through energy efficient products and practices.

Lenovo® is proud to offer our customers products with an ENERGY STAR compliant designation. Lenovo computers of the following machine types, if the ENERGY STAR mark is affixed, have been designed and tested to conform to the ENERGY STAR program requirements for computers.

- 20332, 80CX

By using ENERGY STAR compliant products and taking advantage of the power-management features of your computer, you reduce the consumption of electricity. Reduced electrical consumption contributes to potential financial savings, a cleaner environment, and the reduction of greenhouse gas emissions.

For more information about ENERGY STAR, visit <http://www.energystar.gov>.

Lenovo encourages you to make efficient use of energy an integral part of your day-to-day operations. To help in this endeavor, Lenovo has preset the following power-management features to take effect when your computer has been inactive for a specified duration:

Table 1. ENERGY STAR power-management features

Windows® 8
Power plan: balanced (plugged in) <ul style="list-style-type: none"> <li>• Turn off the display:               <ul style="list-style-type: none"> <li>After 5 minutes</li> </ul> </li> <li>• Put the computer to sleep:               <ul style="list-style-type: none"> <li>After 30 minutes</li> </ul> </li> <li>• Advanced power settings:               <ul style="list-style-type: none"> <li>- Turn off hard disks:                   <ul style="list-style-type: none"> <li>After 20 minutes</li> </ul> </li> </ul> </li> </ul>

To awaken your computer from a Sleep mode, press any key on your keyboard. For more information about these settings, refer to your Windows Help and Support information system.

## Product specific Notices

### ■ ■ Electronic emissions notices

The following information refers to Lenovo Yoga 2 11, machine type 20332, 80CX.

#### ■ Federal Communications Commission (FCC) Statement

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 the 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.

Properly shielded and grounded cables and connectors must be used in order to meet FCC emission limits. Proper cables and connectors are available from Lenovo authorized dealers. Lenovo is not responsible for any radio or television interference caused by using other than recommended cables or connectors or 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) Incorporated

1009 Think Place - Building One

Morrisville, NC 27560

U.S.A.

Telephone: (919) 294-5900



## Product specific Notices

### ■ 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.

### ■ German Class B Compliance Statement

Deutschsprachiger EU Hinweis:

#### **Hinweis für Geräte der Klasse B EU-Richtlinie zur Elektromagnetischen Verträglichkeit**

Dieses Produkt entspricht den Schutzanforderungen der EU-Richtlinie 2004/108/EG (früher 89/336/EWG) zur Angleichung der Rechtsvorschriften über die elektromagnetische Verträglichkeit in den EU-Mitgliedsstaaten und hält die Grenzwerte der EN 55022 Klasse B ein.

Um dieses sicherzustellen, sind die Geräte wie in den Handbüchern beschrieben zu installieren und zu betreiben. Des Weiteren dürfen auch nur von der Lenovo empfohlene Kabel angeschlossen werden. Lenovo übernimmt keine Verantwortung für die Einhaltung der Schutzanforderungen, wenn das Produkt ohne Zustimmung der Lenovo verändert bzw. wenn Erweiterungskomponenten von Fremdherstellern ohne Empfehlung der Lenovo gesteckt/ eingebaut werden.

#### **Deutschland:**

#### **Einhaltung des Gesetzes über die elektromagnetische Verträglichkeit von Betriebsmitteln**

Dieses Produkt entspricht dem "Gesetz über die elektromagnetische Verträglichkeit von Betriebsmitteln" EMVG (früher "Gesetz über die elektromagnetische Verträglichkeit von Geräten"). Dies ist die Umsetzung der EU-Richtlinie 2004/108/EG (früher 89/336/EWG) in der Bundesrepublik Deutschland.

**Zulassungsbescheinigung laut dem Deutschen Gesetz über die elektromagnetische Verträglichkeit von Betriebsmitteln, EMVG vom 20. Juli 2007 (früher Gesetz über die elektromagnetische Verträglichkeit von Geräten), bzw. der EMV EG Richtlinie 2004/108/EC (früher 89/336/EWG), für Geräte der Klasse B.**

Dieses Gerät ist berechtigt, in Übereinstimmung mit dem Deutschen EMVG das EG-Konformitätszeichen - CE - zu führen. Verantwortlich für die Konformitätserklärung nach Paragraf 5 des EMVG ist die Lenovo (Deutschland) GmbH, Gropiusplatz 10, D-70563 Stuttgart.

Informationen in Hinsicht EMVG Paragraf 4 Abs. (1) 4:

**Das Gerät erfüllt die Schutzanforderungen nach EN 55024 und EN 55022 Klasse B.**

## Product specific Notices

### ■ European Union Compliance Statement Class B Compliance

European Union - Compliance to the Electromagnetic Compatibility Directive

This product is in conformity with the protection requirements of EU Council Directive 2004/108/EC on the approximation of the laws of the Member States relating to electromagnetic compatibility. Lenovo cannot accept responsibility for any failure to satisfy the protection requirements resulting from a non-recommended modification of the product, including the installation of option cards from other manufacturers.

This product has been tested and found to comply with the limits for Class B Information Technology Equipment according to European Standard EN 55022. The limits for Class B equipment were derived for typical residential environments to provide reasonable protection against interference with licensed communication devices.

EU Contact Address: Lenovo, Einsteinova 21, 851 01 Bratislava, Slovakia



## Specifications

**Model Name:** Lenovo Yoga 2 11  
**Machine Type:** 20332, 80CX

**Note:** The following specifications may contain technical inaccuracies or typographical errors. Lenovo reserves the right to improve and/or change specifications at any time without notice.

### Form Factor

Dimensions	Appr. 298 mm × 206 mm × 17.2 mm
Weight	Appr. 1.45 kg
LCD size	11.6-inch

### Processor

Processor	View the system properties of your computer. You can do this as follows: Open the <b>Control Panel</b> , and then select <b>System and Security</b> → <b>System</b> .
-----------	---

### Memory

Type and speed	DDR3L
Maximum supported capacity	4 GB

### SSD

Capacity	320G+16G/500G+16G
Interface	SATA

### Display

Touch Screen	Multi-touch screen
--------------	--------------------

### I/O Ports

USB	USB 2.0 × 1, USB 3.0 × 1
Audio	Combo audio jack × 1
Video/Audio	Micro HDMI × 1
Card reader	2 in 1 card reader (SD/MMC)

### Battery pack

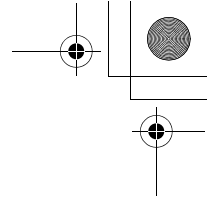
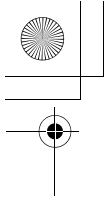
Type	Li-Polymer
Cells/Capacity	4 cell, 34 Wh

### AC power adapter

Input	100 - 240 V, 50 - 60 Hz AC
Output voltage	20 V DC
Power	45 W

### Miscellaneous

Camera	1.0 Mega, 720P HD
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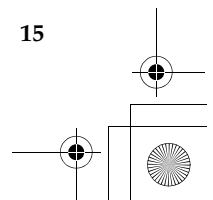
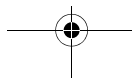
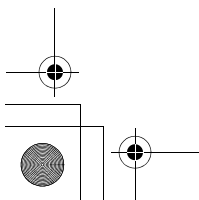
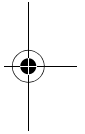
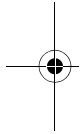
## Trademarks

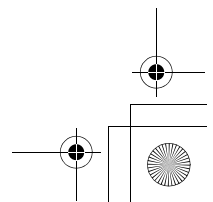
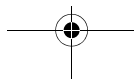
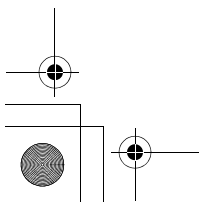
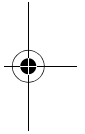
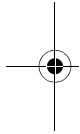
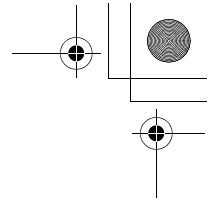
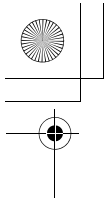
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Lenovo

Onekey

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# Lenovo Yoga 2 11

## User Guide



Read the safety notices and important tips in the included manuals before using your computer.

#### Notes

- Before using the product, be sure to read *Lenovo Safety and General Information Guide* first.
- Some instructions in this guide may assume that you are using Windows® 8. If you are using another Windows operating system, some operations may be slightly different. If you are using other operating systems, some operations may not apply to you.
- The features described in this guide are common to most models. Some features may not be available on your computer or your computer may include features that are not described in this user guide.
- The illustrations in this manual may differ from the actual product. Please refer to the actual product.

#### Regulatory Notice

- The *Regulatory Notice* provides information about the radio frequency and safety standards. Be sure to read it before using wireless devices on your computer.
- To refer to it, go to <http://www.lenovo.com>, click **Support**, and then click **User's guides and manuals**.

**First Edition (August 2013)**

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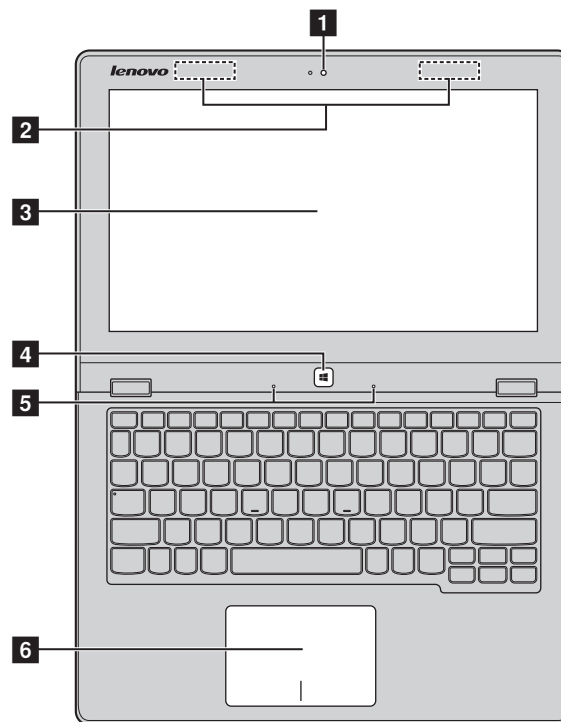
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## Chapter 1. Getting to know your computer

### ■ ■ Top view

---




**Note:** The dashed areas indicate parts that are not visible externally.

⦿ **Attention:**

- When closing the display panel, be careful *not* to leave pens or any other objects in between the display panel and the keyboard. Otherwise, the display panel may be damaged.

## Chapter 1. Getting to know your computer

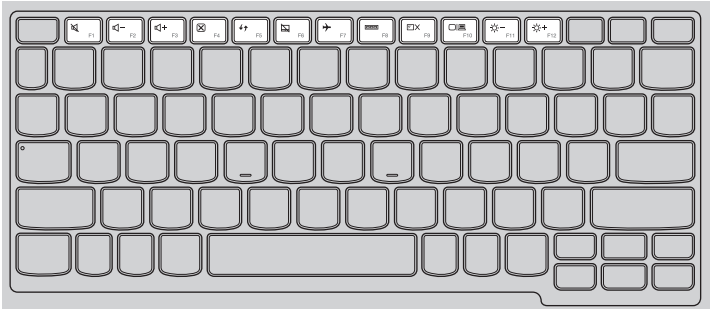
- |  |   |  |
|--|---|--|
| <b>1</b>   | <b>Integrated camera (on select models)</b> | Use the camera for the video communication.  |
| <b>2</b>   | <b>Wireless LAN antennas</b>                | Connect to the wireless LAN adapter to send and receive wireless radio signals.  |
| <b>3</b>   | <b>Multi-touch screen</b>                   | Functions as the visual display as well as one of the two primary input methods.   |
| <b>Note:</b> For details, see “Touch screen operation” on page 17. |   |  |
| <b>4</b>   | <b>Windows button</b>                       | Press this button to:<br>Toggle between the current view and the Start screen.<br>-or-<br>Wake up the computer from sleep mode.  |
| <b>5</b>   | <b>Built-in microphones</b>                 | Capture sound which can be used for video conferencing, voice narration, or audio recording.   |
| <b>6</b>   | <b>Touch pad</b>                            | The touch pad functions as a conventional mouse.<br><br><b>Touch pad:</b> To move the pointer on the screen, slide your fingertip over the pad in the direction in which you want the pointer to move.<br><b>Touch pad buttons:</b> The functions of the left/right side correspond to those of the left/right mouse button on a conventional mouse. |













**Note:** You can enable/disable the touch pad by pressing **F6** (  ).

Chapter 1. Getting to know your computer

■ Keyboard function keys

You can access certain system settings quickly by pressing the appropriate function keys.



 F1 : Mutes/unmutes the sound.	 F7 : Enables/disables Airplane mode.
 F2 : Decreases the volume level.	 F8 : Displays all currently active apps.
 F3 : Increases the volume level.	 F9 : Turns on/off the backlight of the LCD screen.
 F4 : Closes the currently active window.	 F10 : Toggles the display between the computer and an external device.
 F5 : Refreshes the desktop or the currently active window.	 F11 : Decreases the display brightness.
 F6 : Enables/disables the touch pad.	 F12 : Increases the display brightness.

**Note:** By default, the screen brightness is set automatically (based on the ambient light level). If you want to adjust the brightness of the screen manually, open the charms bar and select **Settings** → **Change PC settings** → **General** → **Screen (Adjust my screen brightness automatically)** and toggle the switch to **Off**.

## Chapter 1. Getting to know your computer

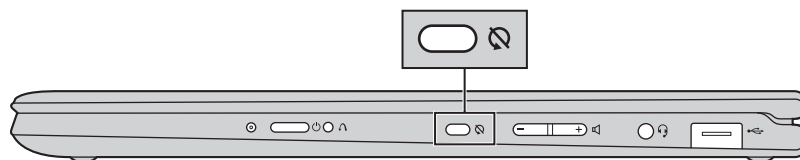
### ■ Screen orientation

You can rotate the display panel to your preferred orientation.

- The orientation of the display automatically changes (alternating between portrait and landscape modes) depending upon how you hold the computer.



- To prevent automatic orientation, press the rotation lock button. It is located on the right edge of the computer. (See below illustration).



■ **Positioning the display panel**

The display panel can be opened to any angle up to 360 degrees.



**Notebook Mode**



Suitable for tasks that require a keyboard and mouse (such as creating documents, writing e-mails, and so on).

## Chapter 1. Getting to know your computer

### Stand Mode (Theater Mode)



Suitable for tasks that require little or no touch (such as viewing photos or playing videos).

### Tablet Mode



Suitable for tasks that require touching the screen often (such as surfing the Web, playing games, and so on).

**Tent Mode (Presentation Mode)**



Suitable for tasks that require limited interaction with the touch screen (such as displaying graphs or a PowerPoint presentations).

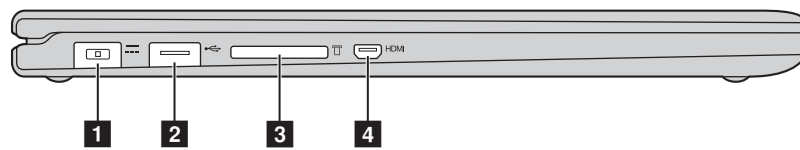
⦿ **Attention:**

- Do *not* open the display with too much force, otherwise the panel or hinges may be damaged.

**Note:** The keyboard and touch pad are automatically locked when the screen is opened beyond 190 degrees (approximately).

## Chapter 1. Getting to know your computer

### ■ ■ Left-side view



**1 AC power adapter jack** Connect the AC power adapter here.

**2 USB port** Connects to USB devices.

**Note:** For details, see “Connecting USB devices” on page 9.

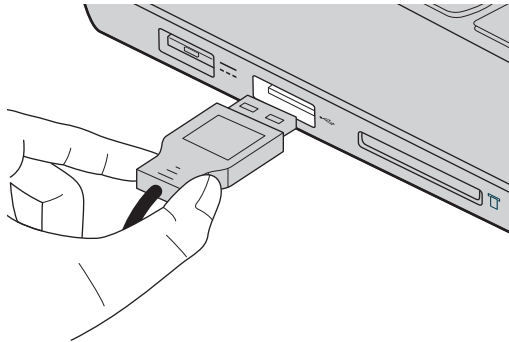
**3 Memory card slot** Insert memory cards (not supplied) here.

**Note:** For details, see “Using memory cards (not supplied)” on page 10.

**4 HDMI port** Connects to devices with HDMI input such as a TV or an external display.

## ■ Connecting USB devices

Your computer comes with two USB ports compatible with USB devices.



The first time you plug a USB device into a particular USB port on your computer, Windows automatically installs a driver for that device. After the driver has been installed, you can disconnect and reconnect the device without performing any additional steps.

**Note:** Typically, Windows detects a new device after it has been connected, and then installs the driver automatically. However, some devices may require you to install the driver before connecting. Check the documentation provided by the device's manufacturer before connecting the device.

Before disconnecting a USB storage device, make sure your computer has finished transferring data to that device. Click the **Safely Remove Hardware and Eject Media** icon in the Windows notification area to remove the device before disconnecting.

**Note:** If your USB device uses a power cord, connect the device to a power source before connecting it. Otherwise, the device may not be recognized.

## Chapter 1. Getting to know your computer

### ■ Using memory cards (not supplied)

Your computer supports the following types of memory cards:

- Secure Digital (SD) card
- MultiMediaCard (MMC)

**Notes:**

- Insert *only* one card in the slot at a time.
- This card reader does not support SDIO devices (e.g., SDIO Bluetooth, etc.).

#### Inserting a memory card

- ① Push the dummy card in until you hear a click.
- ② Gently pull the dummy card out of the memory card slot.

**Note:** The dummy card is used for preventing dust and small particles from entering the inside of your computer when the memory card slot is not in use. Retain the dummy card for future use.

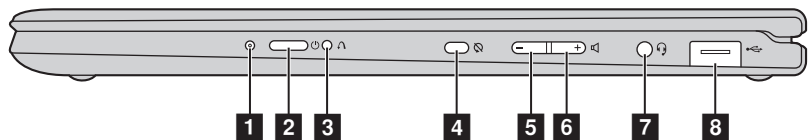
- ③ Slide the memory card in until it clicks into place.

#### Removing a memory card

- ① Push the memory card in until you hear a click.
- ② Gently pull the memory card out of the memory card slot.

**Note:** Before removing the memory card, disable it by using the Windows safely remove hardware and eject media utility to avoid data corruption.

■ ■ Right-side view



- |   |   |  |
|---|---|--|
| <b>1</b>  | <b>Power and battery status indicator</b> |  |
| <b>2</b>  | <b>Power button</b>                       | Press this button to turn on the computer.   |
| <b>3</b>  | <b>Novo button</b>                        | When the computer is off, press this button to start the Lenovo OneKey Recovery System or the BIOS setup utility, or to enter the boot menu.   |
| <b>4</b>  | <b>Rotation lock button</b>               | Keeps the screen locked in portrait or landscape orientation. Locking the screen rotation will disable the gravity sensing function, thereby preventing the screen from changing its orientation automatically depending upon the angle at which it is held. |
| <b>5</b>  | <b>Volume down button</b>                 | Decreases the volume level.  |
| <b>6</b>  | <b>Volume up button</b>                   | Increases the volume level.  |
| <b>7</b>  | <b>Combo audio jack</b>                   | Connects to headsets.  |
| <b>Notes:</b> <ul style="list-style-type: none"><li>• The combo audio jack does not support conventional microphones.</li><li>• The recording function may not be supported if third-party headphones or headsets are connected, due to different industry standards.</li></ul> |   |  |
| <b>8</b>  | <b>USB port</b>                           | Connects to USB 2.0 devices.   |
| <b>Note:</b> For details, see “Connecting USB devices” on page 9.   |   |  |

## Chapter 2. Starting to use Windows 8

### ■ ■ Configuring the operating system for the first time

You may need to configure the operating system when it is first used. The configuration process may include the procedures below:

- Accepting the end user license agreement
- Configuring the internet connection
- Registering the operating system
- Creating a user account


### ■ ■ Operating system interfaces

Windows 8 comes with two main User Interface: the Start screen and the desktop.

To switch from the Start screen to the desktop, do one of the following:

- Select the desktop tile on the Start screen.
- Press the Windows button.
- Press Windows key + D.

To switch from the desktop to the Start screen, do one of the following:

- Select **Start**  from the charms.
- Move the pointer to the lower-left corner and then select the Start screen thumbnail when it is displayed.

**Start screen**



**Desktop**



## ■ ■ The charms

---

The five charms provide new and faster ways to perform many basic tasks, and are always available regardless of which app you are currently in.

To display the charms, do one of the following:

- Move the pointer to the upper-right or lower-right corner until the charms bar is displayed.
- Use one finger to swipe in from the right edge of the screen until the charms bar is displayed.
- Press Windows key + C.



### Search charm

The **Search** charm is a powerful new way to find whatever you are looking for, including apps, settings and files.



## Chapter 2. Starting to use Windows 8



### Share charm

The **Share** charm lets you send links, photos, and more to your friends and social networks without leaving the app you are in.



### Start charm

The **Start** charm is a fast way to go to the Start screen.



### Devices charm

The **Devices** charm allows you to connect or send files to any external devices, such as digital cameras, TVs, or printers.



### Settings charm

The **Settings** charm lets you perform basic tasks, such as setting the volume or shutting down the computer. Also, you can get to the Control Panel through the **Settings** charm when using the desktop screen.



## ■ ■ Putting the computer to sleep or shutting it down

When you have finished working with your computer, you can put it to sleep or shut it down.

### ■ Putting your computer to sleep

If you will be away from your computer for a short time, put the computer to sleep. When the computer is in sleep mode, you can quickly wake it to resume use, bypassing the startup process.

To put the computer to sleep, do one of the following:

- Close the display panel.
- Press the Power button.
- Open the charms and then select **Settings**  → **Power**  → **Sleep**.

**Note:** Put your computer to sleep before you move it. Moving your computer while the hard disk is spinning can damage the hard disk, causing loss of data.


To wake the computer, do one of the following:

- Press any key on the keyboard. (Notebook mode only)
- Press the Power button.
- Press the Windows button.

## Chapter 2. Starting to use Windows 8

### ■ Shutting down the computer

If you are not going to use your computer for a long time, shut it down.  
To shut down your computer:

- 1 Open the charms, and then select **Settings** .

1



- 2 Select **Power**  → **Shut down**.

2





■ ■ **Touch screen operation**

The display panel can accept inputs like a tablet, using the multi-touch screen, or like a traditional notebook computer, using the keyboard and touch pad.




■ **Multi-touch gestures**

You can touch the screen with one or more fingertips to perform a variety of tasks.


Frequently used gestures	Tasks performed
<p><b>Tap</b> Tap once on an item.</p> 	<p>Performs an action, such as starting an app, opening a link, or performing a command. Similar to left-clicking with a mouse.</p>
<p><b>Press and hold</b> Press your finger down and leave it there for a moment.</p> 	<p>Allows you to see detailed information before selecting an action. Can also open a menu with more options. Similar to right-clicking with a mouse.</p>

## Chapter 2. Starting to use Windows 8

(continued)


Frequently used gestures	Tasks performed
<b>Zoom</b> Move two fingers together or apart while touching the screen. 	Zooms in and out on visual apps, such as pictures and maps. Can also jump to the beginning or end of a list.
<b>Rotate</b> Place two or more fingers on an item and then turn your hand. 	Turns an object. (Note: Not all items can be rotated, depending upon the app.)
<b>Slide</b> Drag your finger across the screen. 	Pans or scrolls through lists and pages. Can also move an object or be used to draw or write, depending upon the app. Similar to pressing and holding to pan and to scrolling with a mouse.

(continued)

Frequently used gestures	Tasks performed
<p><b>Swipe</b> Start from any edge of the screen, then swipe inwards toward the center.</p> 	<p>Swiping down from the top edge or up from the bottom edge displays a task bar on the bottom of the screen with app commands, including save, edit, and delete.</p> <p>If you have an app currently open, you can also:</p> <ul style="list-style-type: none"><li>• Swipe from the top edge to halfway down the screen without lifting your finger to dock that app on the left or right side of the screen. This allows you to keep two apps open simultaneously in a split-screen format.</li><li>• Swipe from the top edge straight down to the bottom edge of the screen continuously without lifting your finger to close the currently open app.</li></ul>

## Chapter 2. Starting to use Windows 8

(continued)

Frequently used gestures	Tasks performed
	<p>Swiping in from the left edge can:</p> <ul style="list-style-type: none"><li>• Bring in and open an app currently running in the background.</li></ul> <p>If there is more than one currently open app, you can:</p> <ul style="list-style-type: none"><li>• Swipe in from the left to bring in an app and, without lifting your finger, push that app quickly back off the left edge of the screen. This displays a list of the apps currently running in the background.</li></ul> <p>Swiping in from the right edge of the screen displays the charms.</p>

## ■ ■ Connecting to wireless LAN




### Enabling wireless connection

To confirm that Airplane mode is disabled, go to the desktop and check the notification area.

If you see the  icon displayed on the lower right, then Airplane mode is on. Otherwise, wireless function is enabled.

**Note:** Airplane mode should be disabled by default.

If Airplane mode is on, do one of the following to enable the wireless function:

- Press **F7** (  ) to disable Airplane mode.
- Open the charms, select **Settings**  →  to open the Network configuration page, and then toggle Airplane mode switch to **Off**.

### Connecting to a wireless LAN

After wireless has been enabled, the computer will automatically scan for available wireless networks and display them in the wireless LAN network list. To connect to a wireless network, click the network name in the list, and then click **Connect**.

**Note:** Some networks require a network security key or passphrase for connection. To connect to one of those networks, ask the network administrator or the Internet Service Provider (ISP) for the security key or passphrase.



## Chapter 2. Starting to use Windows 8

### ■ ■ Help and support

---

If you have any problems using the operating system, see the Windows Help and Support file. To open the Windows Help and Support file, do one of the following:

- Select the **Settings** charm, then select **Help**.
- Press Fn + F1.



You can read the Windows Help and Support file on your computer. You can also get online help and support by clicking the link listed under **More to explore**.

## Chapter 3. Lenovo OneKey Recovery System

The Lenovo OneKey Recovery System is software designed to back up and restore your computer. You can use it to restore the system partition to its original status in case of a system failure. You can also create user backups for easy restoration as required.

**Note:** To utilize the features of the OneKey Recovery System, your hard disk already includes a hidden partition by default to store the system image file and the OneKey Recovery System program files. This default partition is hidden for security reasons, which explains why the available disk space is less than the stated capacity.

### ■ Backing up the system partition

You can back up the system partition to an image file. To back up the system partition:

- 1 Press the Novo button to start the Lenovo OneKey Recovery System.
- 2 Click **System Backup**.
- 3 Select a back-up location and click **Next** to start the backup.

**Notes:**

- You can choose a back-up location on the local hard disk drive or an external storage device.
- Remove the removable hard disk drive before starting the Lenovo OneKey Recovery System. Otherwise, data from the removable hard disk drive might be lost.
- The back-up process may take a while.
- The back-up process is only available when Windows can be started normally.

### ■ Restoring

You can choose to restore the system partition to its original status or to a previously created back-up point. To restore the system partition:

- 1 Press the Novo button to start the Lenovo OneKey Recovery System.
- 2 Click **System Recovery**. The computer will restart to the recovery environment.
- 3 Follow the on-screen instructions to restore the system partition to its original status or to a previously created back-up point.

**Notes:**

- The recovery process is irreversible. Make sure to back up any data you wish to save on the system partition before starting the recovery process.
- The recovery process may take a while. So be sure to connect the AC power adapter to your computer during the recovery process.
- The above instructions should be followed when Windows can be started normally.

If Windows cannot be started, then follow the steps below to start the Lenovo OneKey Recovery System:

- 1 Shut down the computer.
- 2 Press the Novo button. From the Novo button menu, select the Lenovo OneKey Recovery System and press Enter.

## Chapter 4. Troubleshooting

### ■ ■ Frequently asked questions

---

This section lists frequently asked questions by category.

#### ■ Finding information

##### **What safety precautions should I follow when using my computer?**

The *Lenovo Safety and General Information Guide* which came with your computer contains safety precautions for using your computer. Read and follow all the precautions when using your computer.

##### **Where can I find the hardware specifications for my computer?**

You can find hardware specification for your computer on the printed flyers which came with your computer.

##### **Where can I find warranty information?**

For the warranty applicable to your computer, including the warranty period and type of warranty service, see the Lenovo limited warranty flyer that came with your computer.

#### ■ Drivers and preinstalled software

##### **Where are the installation discs for Lenovo preinstalled software (desktop software)?**

Your computer did not come with installation discs for Lenovo preinstalled software. If you need to reinstall any preinstalled software, you can find the installation program on the D partition of your hard disk. If you cannot find the installation program there, you can also download it from the Lenovo consumer support website.

##### **Where can I find drivers for the various hardware devices of my computer?**

If your computer is preinstalled with a Windows operating system, Lenovo provides drivers for all the hardware devices that you need on the D partition of your hard disk. You can also download the latest device drivers from the Lenovo consumer support website.

#### ■ Lenovo OneKey Recovery System

##### **Where are the recovery discs?**

Your computer did not come with recovery discs. Use the Lenovo OneKey Recovery System if you need to restore the system to its factory status.

##### **What can I do if the back-up process fails?**

If you can start the backup but it fails during the back-up process, try the following steps:

- ❶ Close all open programs, and then restart the back-up process.
- ❷ Check to see if the destination media is damaged. Select another path and then try again.

### When do I need to restore the system to its factory status?

Use this feature when the operating system fails to start up. If there is critical data on the system partition, back it up before starting recovery.

### ■ BIOS setup utility

#### What is the BIOS setup utility?

The BIOS setup utility is ROM-based software. It displays basic computer information and provides options for setting boot devices, security, hardware mode, and other preferences.

#### How can I start the BIOS setup utility?

To start the BIOS setup utility:

- ❶ Shut down the computer.
- ❷ Press the Novo button and then select **BIOS Setup**.

#### How can I change the boot mode?

There are two boot modes: UEFI and Legacy. To change the boot mode, start the BIOS setup utility and set boot mode to UEFI or Legacy support on the boot menu.

#### When do I need to change the boot mode?

The default boot mode for your computer is UEFI mode. If you need to install a legacy Windows operating system (that is, any operating system before Windows 8) on your computer, you must change the boot mode to Legacy support. The legacy Windows operating system cannot be installed if you don't change the boot mode.

### ■ Getting help

#### How can I contact the customer support center?

See "Chapter 3. Getting help and service" in the *Lenovo Safety and General Information Guide*.

## Chapter 4. Troubleshooting

### ■ ■ Troubleshooting

If you do not find your problem here, see Chapter 1. The following section only describes problems that might negate the need to refer to the more comprehensive information in Chapter 1.

#### Display problems


When I turn on the computer, nothing appears on the screen.

- If the screen is blank, make sure that:
  - The AC power adapter is connected to the computer, and the power cord is plugged into a working electrical outlet.
  - The computer power is on. (Press the Power button again for confirmation.)
- If these items are properly set, and the screen remains blank, have the computer serviced.

When I turn on the computer, only a white cursor appears on a blank screen.

- Restore backed-up files to your Windows environment or the entire contents of your hard disk to its original factory contents using the Lenovo OneKey Recovery System. If you still see only the cursor on the screen, have the computer serviced.

The screen goes blank while the computer is on.

- Your power management is enabled. Do one of the following to resume from sleep or hibernation mode:
  - Press any key on the keyboard. (Notebook mode only)
  - Press the Power button.
  - Press the Windows button.
  - Press **F9** (  ) to confirm whether the backlight of the LCD screen has been turned off.

#### Sleep or hibernation problems

The critical low-battery error message appears, and the computer immediately turns off.

- The battery power is getting low. Connect the AC power adapter to the computer.

The computer enters sleep mode immediately after Power-on.

- Make sure that:
  - The battery is charged.
  - The operating temperature is within the acceptable range. See "Chapter 2. Use and care Information" in the *Lenovo Safety and General Information Guide*.

**Note:** If the battery is charged and the temperature is within range, have the computer serviced.

## Chapter 4. Troubleshooting



The computer does not return from sleep mode and the computer does not work.

- If the computer does not return from sleep mode, it may have entered hibernation mode automatically because the battery is depleted. Check the power indicator.
- If your computer is in sleep mode, connect the AC power adapter to the computer, then press the Windows button or the Power button.
- If your computer is in hibernation mode or powered-off, connect the AC power adapter to the computer, then press the Power button to resume operation.

**Note:** If the system still does not return from sleep mode, your system has stopped responding, and you cannot turn off the computer; reset the computer. Unsaved data may be lost. To reset the computer, press and hold the Power button for five seconds or more. If the computer still does not reset, remove the AC power adapter.

### Display panel problems

The screen is blank.

- Do the following:
  - If you are using the AC power adapter or the battery, and the battery status indicator is on, press **F12** (  ) to make the screen brighter.
  - If the power indicator is blinking, press the Power button to resume from sleep mode.
  - If the problem persists, follow the solution in the next problem "The screen is unreadable or distorted."
  - Press **F9** (  ) to confirm whether the backlight of the LCD screen has been turned off.

The screen is unreadable or distorted.

- Make sure that:
  - The screen resolution and color quality are correctly set.
  - The monitor type is correct.

Incorrect characters appear on the screen.

- Are the operating system or programs installed correctly? If they are installed and configured correctly, have the computer serviced.

### Sound problems

No sound can be heard from the speaker even when the volume is turned up.

- Make sure that:
  - The Mute function is off.
  - The combo audio jack is not being used.
  - Speakers are selected as the playback device.

## Chapter 4. Troubleshooting

### Battery problems

Your computer shuts down before the battery status indicator shows empty.

-or-

Your computer operates after the battery status indicator shows empty.

- Recharge the battery.

### A startup problem

The Microsoft® Windows operating system does not start.

- For details, see “Lenovo OneKey Recovery System” on page 23.

### OneKey Recovery System problems

Backup cannot be made.

- Make sure that you are currently using a Windows operating system.
- There may not be enough space to store the backed-up data. You will need to free more hard disk space on your backup's partition.

Failure to restore system partition to factory default.

- The system partition (e.g. the partition size or the drive capacity of C) has been modified.

### Other problems

Your computer does not respond.

- To turn off your computer, press and hold the Power button for five seconds or more. If the computer still does not respond, remove the AC power adapter.
- Your computer might lock when it enters sleep mode during a communication operation. Disable the sleep timer when you are working on the network.

The connected external device does not work.

- Do *not* connect or disconnect any external device cables other than USB while the computer power is on. Otherwise, you might damage your computer.
- When using high power consumption external devices such as an external USB optical disk drive, use an external device power adapter. Otherwise, the device may not be recognized, or the system may shut down as a result.

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Lenovo

Safety and General Information  
Guide



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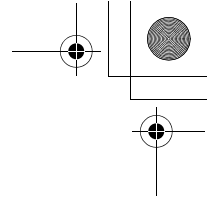
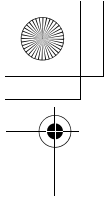


**If your product is not working correctly,  
DO NOT RETURN IT TO THE STORE.**

For technical assistance, contact a Lenovo support specialist 24 hours a day by calling toll free **1-877-4 LENOVO (1-877-453-6686)**.

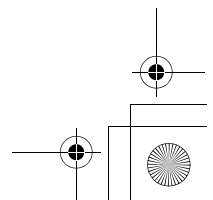
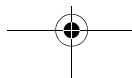
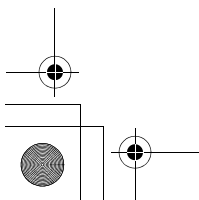
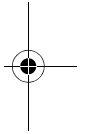
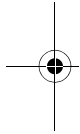
Additionally, you can find support information and updates on the Lenovo Web site located at **<http://consumersupport.lenovo.com>**.

\* Only for the users from the United States.



# Lenovo

## Safety and General Information Guide



#### Notes

- Before using the product, be sure to read “Chapter 1. Important safety information” first.

**Fifth Edition (July 2011)**

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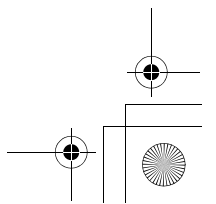
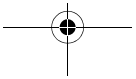
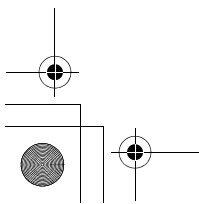
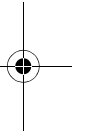
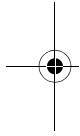
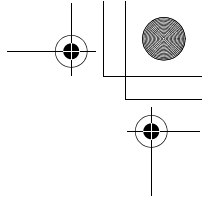
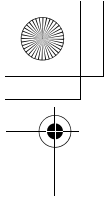
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## Chapter 1. Important safety information

This information can help you safely use your notebook personal computer. Follow and retain all information included with your computer. The information in this document does not alter the terms of your purchase agreement or the Lenovo Limited Warranty.

Customer safety is important. Our products are developed to be safe and effective. However, personal computers are electronic devices. Power cords, power adapters, and other features can create potential safety risks that can result in physical injury or property damage, especially if misused. To reduce these risks, follow the instructions in this document carefully. By carefully following the information contained in this document and provided with your product, you can help protect yourself from hazards and create a safer computer work environment.

### ■ ■ Conditions that require immediate action

Products can become damaged due to misuse or neglect. Some product damage is serious enough that the product should not be used again until it has been inspected and, if necessary, repaired by an authorized servicer.

As with any electronic device, pay close attention to the product when it is turned on. On very rare occasions, you might notice an odor or see a puff of smoke or sparks vent from your product. Or you might hear sounds like popping, cracking or hissing. These conditions might merely mean that an internal electronic component has failed in a safe and controlled manner. Or, they might indicate a potential safety issue. However, do not take risks or attempt to diagnose the situation yourself. Contact the customer support center for further guidance. For a list of service and support phone numbers, go to <http://consumersupport.lenovo.com/>.

Frequently inspect your computer and its components for damages or signs of danger. If you have any question about the condition of a component, do not use the product. Contact the customer support center or the product manufacturer for instructions on how to inspect the product and have it repaired, if necessary.

In the unlikely event that you notice any of the following conditions, or if you have any safety concerns with your product, stop using the product and unplug it from the power source and telecommunication lines until you can speak to the customer support center for further guidance.

## Chapter 1. Important safety information

- Power cords, plugs, power adapters, extension cords, surge protectors, or power supplies that are cracked, broken, or damaged
- Signs of overheating, smoke, sparks, or fire
- Damage to a battery (such as cracks, dents, or creases), discharge from a battery, or a buildup of foreign substances on the battery
- A cracking, hissing or popping sound, or strong odor that comes from the product
- Signs that liquid has been spilled or an object has fallen on to the computer product, the power cord or power adapter
- The computer product, power cord, or power adapter has been exposed to water
- The product has been dropped or damaged in any way
- The product does not operate normally when you follow the operating instructions

**Note:** If you notice these conditions with a product (such as an extension cord) that is not manufactured for or by Lenovo, stop using that product until you can contact the product manufacturer for further instructions, or until you get a suitable replacement.

## Chapter 1. Important safety information

### ■ Safety guidelines

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

#### ■ Service and upgrades

Do not attempt to service a product yourself unless instructed to do so by the customer support center or your documentation.

**Note:** Some computer parts can be upgraded or replaced by the customer.

Replacement parts approved for customer installation are referred to as Customer Replaceable Units, or CRUs. Lenovo provides documentation with instructions when it is appropriate for customers to install options or replace CRUs. You must closely follow all instructions when installing or replacing parts. The Off state of a power indicator does not necessarily mean that voltage levels inside a product are zero. Before you remove the covers from a product equipped with an AC power cord, always make sure that the power is turned off and that the product is unplugged from any power source.

Before replacing any CRUs, turn off the computer and wait three to five minutes to let the computer cool before opening the cover.

#### ■ Power cords and power adapters

Use only the power cords and power adapters supplied by the product manufacturer. The power cord and power adapter are intended for use with this product only. They should never be used with any other product.

The power cords shall be safety approved. For Germany, it shall be H05VV-F, 3G, 0.75 mm<sup>2</sup>, or better. For other countries, the suitable types shall be used accordingly.

Never wrap a power cord around a 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 or any other cables so that they will not be walked on, tripped over, or pinched by objects.

## Chapter 1. Important safety information

Protect power cords and power adapters from liquids. For instance, do not leave your power 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 power cord or power adapter has been stressed by misuse. Liquids also can cause gradual corrosion of power cord terminals and/or the connector terminals on a power 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 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.

Do not share an electrical outlet with other home or commercial appliances that draw large amounts of electricity; otherwise, unstable voltage might damage your computer, data, or attached devices.

## Chapter 1. Important safety information

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.

Be sure that the power outlet provides the correct voltage and current for the product you are installing.

Carefully connect and disconnect the equipment from the electrical outlet.

### ■ Power supply statement

Never remove the cover on a power supply or any part that has the following label attached.



Hazardous voltage, current, and energy levels are present inside any component that has this label attached. There are no serviceable parts inside these components. If you suspect a problem with one of these parts, contact a service technician.



### ■ External devices

Do not connect or disconnect any external device cables other than USB and 1394 cables while the computer power is on; otherwise, you might damage your computer. To avoid possible damage to attached devices, wait at least five seconds after the computer is shut down to disconnect external devices.

## Chapter 1. Important safety information

### ■ Batteries

Personal computers manufactured by Lenovo contain a coin cell battery to provide power to the system clock. In addition, many mobile products, such as notebook computers, utilize a rechargeable battery pack to provide system power when in portable mode. Batteries supplied by Lenovo for use with your product have been tested for compatibility and should only be replaced with approved parts.

Never attempt to open or service any battery. Do not crush, puncture, or incinerate batteries or short circuit the metal contacts. Do not expose the battery to water or other liquids. Only recharge the battery pack strictly according to instructions included in the product documentation.

Battery abuse or mishandling can cause the battery to overheat, which can cause gasses or flame to “vent” from the battery pack or coin cell. If your battery is damaged, or if you notice any discharge from your battery or the buildup of foreign materials on the battery leads, stop using the battery and obtain a replacement from the battery manufacturer.

Batteries can degrade when they are left unused for long periods of time. For some rechargeable batteries (particularly Lithium Ion batteries), leaving a battery unused in a discharged state could increase the risk of a battery short circuit, which could shorten the life of the battery and can also pose a safety hazard. Do not let rechargeable Lithium-Ion batteries completely discharge or store these batteries in a discharged state.

### ■ Rechargeable battery notice

Do not attempt to disassemble or modify the battery pack. Attempting to do so can cause an explosion, or liquid leakage from the battery pack. A battery pack other than the one specified by Lenovo, or a disassembled or modified battery pack is not covered by the warranty.

If the rechargeable battery pack is incorrectly replaced, there is danger of an explosion. The battery pack contains a small amount of harmful substances. To avoid possible injury:

- Replace only with a battery of the type recommended by Lenovo.
- Keep the battery pack away from fire.
- Do not expose it to water or rain.
- Do not attempt to disassemble it.
- Do not short-circuit it.

## Chapter 1. Important safety information

- Keep it away from children.
- Do not drop the battery pack.

Do not put the battery pack in trash that is disposed of in landfills. When disposing of the battery, comply with local ordinances or regulations.

If the battery pack is to be stored separately, place it in a dry environment of a temperature between 10-35 °C and keep it away from direct sunlight. To extend battery life, we recommend you charge the battery to approximately 30 to 50% capacity and recharge it every three months to prevent the battery from over-discharging.

This system does not support batteries that are not genuine Lenovo-made or authorized. The system will continue to boot, but may not charge unauthorized batteries.

### ■ Lithium coin cell battery notice

Danger of explosion if battery is incorrectly replaced.

When replacing the lithium coin cell battery, use only the same or an equivalent type that is recommended by the manufacturer. The battery contains lithium and can explode if not properly used, handled, or disposed of.

Do not:

- Throw or immerse into water
- Heat to more than 100°C (212°F)
- Repair or disassemble

Dispose of the battery as required by local ordinances or regulations.

### ■ Heat and product ventilation

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

- When your computer is turned on or the battery is charging, the base, the palm rest, and some other parts may become hot. Avoid keeping your hands, your lap, or any other part of your body in contact with a hot section of the computer for any extended length of time. When you use the

## Chapter 1. Important safety information

keyboard, avoid keeping your palms on the palm rest for a prolonged period of time. Your computer generates some heat during normal operation. The amount of heat depends on the amount of system activity and the battery charge level. Extended contact with your body, even through clothing, could cause discomfort or even a skin burn. Periodically take breaks from using the keyboard by lifting your hands from the palm rest; and be careful not to use the keyboard for any extended length of time.

- 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.
- When the AC adapter is connected to an electrical outlet and your computer, it generates heat. Do not place the adapter in contact with any part of your body while using it. Never use the AC adapter to warm your body. Extended contact with your body, even through clothing, may cause a skin burn.

For your safety, always follow these basic precautions with your computer:

- Keep the cover closed whenever the computer is plugged in.
- Regularly inspect the outside of the computer for dust accumulation.
- Remove dust from vents and any perforations in the bezel. More frequent cleanings might be required for computers in dusty or high-traffic areas.
- Do not restrict or block any ventilation openings.
- Do not operate your computer inside furniture, as this might increase the risk of overheating.
- Airflow temperatures into the computer should not exceed 35°C (95°F).

### ■ 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 computer, do the following:

- Always store CD/DVD discs in their original packaging.

## Chapter 1. Important safety information

- 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.

### ■ Laser compliance statement

Some personal computer models are equipped from the factory with a CD or DVD drive. CD and DVD drives are also sold separately as options. CD and DVD drives are laser products. The drive's classification label (shown below) is on the surface of the drive.

CLASS 1 LASER PRODUCT  
LASER KLASSE 1  
LUOKAN 1 LASERLAITE  
APPAREIL A LASER DE CLASSE 1  
KLASS 1 LASER APPARAT



Example of the label

These drives are certified in the U.S. to conform to the requirements of the Department of Health and Human Services 21 Code of Federal Regulations (DHHS 21 CFR) Subchapter J for Class 1 laser products. Elsewhere, these drives are certified to conform to the requirements of the International Electrotechnical Commission (IEC) 60825-1 and CENELEC EN 60825-1 for Class 1 laser products.

Class 1 laser products are not considered hazardous. The design of the laser system and the optical storage drive ensures that there is no exposure to laser

## Chapter 1. Important safety information

radiation above a Class 1 level during normal operation, user maintenance, or servicing.

### **When a CD or DVD drive is installed, note the following handling instructions.**

Use of controls, adjustments, or performance of procedures other than those specified herein might result in hazardous radiation exposure.

Do not remove the drive covers. Removing the covers of the CD or DVD drive could result in exposure to hazardous laser radiation. There are no serviceable parts inside the CD or DVD drive.

### **Some CD and DVD drives contain an embedded Class 3A or Class 3B laser diode. Note the following statement.**

Do not stare into the beam, do not view directly with optical instruments, and avoid direct exposure to the beam.

### ■ **Electrical current safety information**

Electric current from power, telephone, and communication cables is hazardous. To avoid a shock hazard:

- Do not use your computer during a lightning storm.
- Do not connect or disconnect any cables or perform installation, maintenance, or reconfiguration of this product during an electrical storm.
- Connect all power cords to a properly wired and grounded electrical outlet.
- Connect to properly wired outlets any equipment that will be attached to this product.
- Whenever possible, use one hand only to connect or disconnect signal cables.
- Never turn on any equipment when there is evidence of fire, water, or structural damage.
- Disconnect the attached power cords, battery pack, and all the cables before you open the device covers, unless instructed otherwise in the installation and configuration procedures.
- Do not use your computer until you have closed the cover. Never use the computer when the cover is open.

## Chapter 1. Important safety information

- Connect and disconnect cables as described in the following procedures when installing, moving, or opening covers on this product or attached devices.

To connect:

1. Turn everything OFF.
2. First, attach all cables to devices.
3. Attach signal cables to connectors.
4. Attach power cords to outlets.
5. Turn devices ON.

To disconnect:

1. Turn everything OFF.
2. First, remove power cords from outlets.
3. Remove signal cables from connectors.
4. Remove all cables from devices.

The power cord must be disconnected from the wall outlet or receptacle before installing all other electrical cables connected to the Lenovo computer.

The power cord may be reconnected to the wall outlet or receptacle only after all other electrical cables have been connected to the computer.

### ■ Liquid crystal display (LCD) notice

For products with mercury-containing fluorescent lamps: (non-LED LCD)

The fluorescent lamp in the liquid crystal display contains mercury; dispose according to local, state, or federal laws.

The LCD is made of glass, and rough handling or dropping the computer can cause the LCD to break. If the LCD breaks and the internal fluid gets into your eyes or on your hands, immediately wash the affected areas with water for at least 15 minutes; if any symptoms are present after washing, get medical care.

### ■ Using headphones or earphones

If your computer has both a headphone connector and an audio-out connector, always use the headphone connector for headphones (also called a headset) or earphones.

## Chapter 1. Important safety information

Excessive sound pressure from earphones and headphones can cause hearing loss. Adjustment of the equalizer to maximum increases the earphones and headphones output voltage and therefore the sound pressure level.

Excessive use of headphones or earphones for a long period of time at high volume can be dangerous if the output of the headphones or earphone connectors do not comply with specifications of EN 50332-2. The headphone output connector of your computer complies with EN 50332-2 Sub clause 7.

This specification limits the computer's maximum wide band true RMS output voltage to 150 mV. To help protect against hearing loss, ensure that the headphones or earphones you use also comply with EN 50332-2 (Clause 7 limits) for a wide band characteristic voltage of 75 mV. Using headphones that do not comply with EN 50332-2 can be dangerous due to excessive sound pressure levels.

If your Lenovo computer came with headphones or earphones in the package, as a set, combination of the headphones or earphones and the computer already complies with the specifications of EN 50332-1. If different headphones or earphones are used, ensure that they comply with EN 50332-1 (Clause 6.5 Limitation Values). Using headphones that do not comply with EN 50332-1 can be dangerous due to excessive sound pressure levels.

### ■ Additional safety information

Plastic bags can be dangerous. Keep plastic bags away from babies and children to avoid danger of suffocation.

#### **(Safety Notice for users in Australia)**

Do not connect phone line while using tablet mode.

#### **(Notice for users in the U.S.A.)**

Handling the cord on this product or cords associated with accessories sold with this product will expose you to lead, a chemical known to the State of California to cause cancer, and birth defects or other reproductive harm.

Wash hands after handling.

#### **(GOST compliance mark)**



## Chapter 2. Use and care Information

### ■ ■ Caring for your computer

Though your computer is designed to function reliably in normal work environments, you need to use common sense in handling it. By following these important tips, you will get the most use and enjoyment out of your computer.

#### ■ Being careful about where and how you work.

- Do not eat or smoke over your keyboard. Particles that fall into your keyboard can cause damage.
- Store packing materials safely out of the reach of children to prevent the risk of suffocation from plastic bags.
- Keep your computer away from magnets, activated cellular phones, electrical appliances, or speakers (within 13 cm or 5 in).
- Avoid subjecting your computer to extreme temperatures (below 5°C/41°F or above 35°C/95°F).
- Some appliances, such as certain portable desktop fans or air purifiers, can produce negative ions. If a computer is close to such an appliance, and is exposed for an extended time to air containing negative ions, it may become electrostatically charged. Such a charge may be discharged through your hands when you touch the keyboard or other parts of the computer, or through connectors on I/O devices connected to it. Even though this kind of electrostatic discharge (ESD) is the opposite of a discharge from your body or clothing to the computer, it poses the same risk of a computer malfunction.

Your computer is designed and manufactured to minimize any effects of electrostatic charge. An electrostatic charge above a certain limit, however, can increase the risk of ESD. Therefore, when using the computer close to an appliance that can produce negative ions, give special attention to the following:

- Avoid directly exposing your computer to the air from an appliance that can produce negative ions.
- Keep your computer and peripherals as far as possible from such an appliance.
- Wherever possible, ground your computer to facilitate safe electrostatic discharge.

## Chapter 2. Use and care Information

### ■ Notice of static-electricity

When you handle options or CRUs, or perform any work inside the computer, take the following precautions to avoid static-electricity damage:

- Limit your movement. Movement can cause static electricity to build up around you.
- Always handle components carefully. Handle adapters, memory modules, and other circuit boards by the edges. Never touch exposed circuitry.
- Prevent others from touching components.
- When you install a static-sensitive option or CRU, touch the static-protective package containing the part to a metal expansion-slot cover or other unpainted metal surface on the computer for at least two seconds. This reduces static electricity in the package and your body.
- Whenever possible, remove the static-sensitive part from the static-protective packaging and install the part without setting it down. When this is not possible, place the static-protective packaging on a smooth, level surface and place the part on it.
- Do not place the part on the computer cover or other metal surface.

### ■ Being gentle with your computer

- Avoid placing any objects (including paper) between the display and the keyboard or under the keyboard.
- Do not drop, bump, scratch, twist, hit, vibrate, push, or place heavy objects on your computer, display, or external devices.
- Avoid turning the display beyond 130°.

## Chapter 2. Use and care Information

### ■ Carrying your computer properly

- Before moving your computer, be sure to remove any media, turn off attached devices, and disconnect cords and cables.
- Be sure your computer is in sleep or hibernation mode, or turned off, before moving it. This will prevent damage to the hard disk drive and data loss.
- When picking up your open computer, hold it by the bottom. Do not pick up or hold your computer by the display.
- Use a quality carrying case that provides adequate cushion and protection. Do not pack your computer in a tightly packed suitcase or bag.

### ■ For outdoor use

- Backup your critical data before you take your computer outdoors.
- Ensure that the battery is full.
- Be sure to turn off the power and close the LCD well.
- When you leave the computer in your car, place it on the back seat to avoid being insulated.
- Carry the AC adapter and power cord with the computer.

### ■ Handling storage media and drives properly

- If your computer comes with an optical drive, do not touch the surface of a disc or the lens on the tray.
- Wait until you hear the CD or DVD click into the center pivot of an optical drive before closing the tray.
- When installing your hard disk, follow the instructions shipped with your hardware, and apply pressure only where needed on the device.

## Chapter 2. Use and care Information

### ■ Data safety

- Do not delete unknown files or change the name of files or directories that were not created by you; otherwise, your computer software might fail to work.
- Be aware that accessing network resources can leave your computer vulnerable to computer viruses, hackers, spyware, and other malicious activities that might damage your computer, software, or data.
- It is your responsibility to ensure that you have adequate protection in the form of firewalls, antivirus software, and anti-spyware software and keep this software up to date.

### ■ Taking care in setting passwords

- Remember your passwords. If you forget a supervisor or hard disk password, Lenovo authorized service providers will not reset it, and you might have to replace your system board or hard disk drive.

### ■ Cleaning the cover of your computer

Occasionally clean your computer as follows:

- 1 Prepare a mixture of a gentle kitchen-use detergent (one that does not contain abrasive powder or strong chemicals such as acid or alkaline). Use 5 parts water to 1 part detergent.
- 2 Absorb the diluted detergent into a sponge.
- 3 Squeeze excess liquid from the sponge.
- 4 Wipe the cover with the sponge, using a circular motion and taking care not to let any excess liquid drip.
- 5 Wipe the surface to remove the detergent.
- 6 Rinse the sponge with clean running water.
- 7 Wipe the cover with the clean sponge.
- 8 Wipe the surface again with a dry, soft lint-free cloth.
- 9 Wait for the surface to dry completely and remove any cloth fibers from the computer surface.

**Note:** Shut down the computer and then disconnect the power cord before cleaning the computer.

## Chapter 2. Use and care Information

### ■ Cleaning your computer keyboard

- ❶ Absorb some isopropyl rubbing alcohol on a soft, dust-free cloth.
- ❷ Wipe each keytop surface with the cloth. Wipe the keys one by one; if you wipe several keys at a time, the cloth may hook onto an adjacent key and possibly damage it. Make sure that no liquid drips onto or between the keys.
- ❸ Allow to dry.
- ❹ To remove any crumbs and dust from beneath the keys, you can use a camera blower with a brush or cool air from a hair drier.

**Note:** Avoid spraying cleaner directly on the display or the keyboard.

### ■ Cleaning your computer display

- ❶ Gently wipe the display with a dry, soft lint-free cloth. If you see a scratchlike mark on your display, it might be a stain transferred from the keyboard when the cover was pressed from the outside.
- ❷ Wipe or dust the stain gently with a soft, dry cloth.
- ❸ If the stain remains, moisten a soft, lint-free cloth with water or a 50-50 mixture of isopropyl alcohol and water that does not contain impurities.
- ❹ Wring out as much of the liquid as you can.
- ❺ Wipe the display again; do not let any liquid drip into the computer.
- ❻ Be sure to dry the display before closing it.

## Chapter 2. Use and care Information

### ■ Other important tips

- Do not put the battery pack in trash that is disposed of in landfills. When disposing of the battery, comply with local ordinances or regulations and your company's safety standards.
- Register your Lenovo products with Lenovo (refer to the Web page: <http://consumersupport.lenovo.com>). This can help authorities return your computer to you if it is lost or stolen. Registering your computer also enables Lenovo to notify you about possible technical information and upgrades.
- Only an authorized Lenovo repair technician should disassemble and repair your computer.
- Do not modify or tape the latches to keep the display open or closed.
- Take care not to turn your computer over while the AC adapter is plugged in. This could break the adapter plug.
- Turn off your computer if you are replacing a device, or else verify that the device is warm- or hot-swappable.
- Before you install any of the following devices, touch a metal table or a grounded metal object. This action reduces any static electricity from your body. The static electricity could damage the device.
  - Memory Card, such as SD Card, Memory Stick, MultiMediaCard, and Memory Stick Pro card.
  - Memory module
- When transferring data to or from a Flash Media Card, such as an SD card, do not put your computer in sleep or hibernation mode before the data transfer is complete. To do so might cause damage to your data.

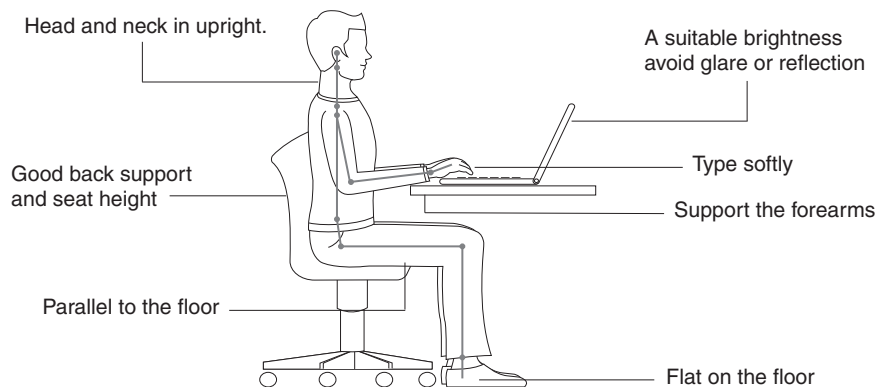
## Chapter 2. Use and care Information

### ■ ■ Accessibility and comfort

#### ■ Ergonomic information

Working in the virtual office may mean adapting to frequent changes in your environment. Following some simple rules will make things easier and bring you the maximum benefits of your computer. Keeping in mind such basics as good lighting and proper seating, for example, can help you improve your performance and achieve greater comfort.

**Note:** This example shows someone in a conventional setting. Even if you work in a casual, less conventional setting, many of the tips in this section still apply. Develop good habits, and they will serve you well.



#### ■ What if you are traveling?

It may not be possible to observe the best ergonomic practices when you are using your computer while on the move or in a casual setting. Regardless of the setting, try to observe as many of the tips as possible. Sitting properly and using adequate lighting, for example, will help you maintain desirable levels of comfort and performance.

#### ■ Questions about vision?

Your computer's visual display screen is designed to meet the highest standards and to provide you with clear, crisp images and large, bright displays that are easy to see, yet easy on the eyes. Of course, any concentrated and sustained visual activity can be tiring. If you have questions on eye fatigue or visual discomfort, consult a vision care specialist for advice.

## Chapter 2. Use and care Information

### ■ Maintenance

An important part of owning your computer is maintenance. With proper care, you can avoid common problems. The following sections provide information that can help you to keep your computer running smoothly.

#### ■ General tips for maintenance

- ① Check the capacity of your hard disk drive from time to time. If the hard disk drive gets too full, the operating system will slow down and might produce errors.
- ② Empty your recycle bin on a regular basis.
  - To free up disk space, uninstall unused application programs.
  - Clean out your Inbox, Sent, and Trash folders from your e-mail client program.
  - At least once a week, make a point to back up your data. If critical data is present, it is a good idea to perform a daily backup. Lenovo has many backup options available for your computer. CD-RW drives and CD-RW/DVD drives are available for most computers and are easily installed.
  - Use or schedule System Restore to take a system snapshot periodically.

**Note:** Always take a system snapshot before installing new drivers, updating software, or installing new software.

- Update device drivers and BIOS when needed.
- Profile your machine at <http://consumersupport.lenovo.com> to keep up to date with current drivers and revisions.
- Keep up to date on device drivers on other non-Lenovo hardware. You might want to read the device driver information release notes prior to updating for compatibility or known issues.
- Keep a log book. Entries might include major hardware or software changes, driver updates, minor issues you have experienced and how you resolved them.
- If required, you can find your country's customer support center at the following Web address: <http://consumersupport.lenovo.com>.  
When calling the customer support center, please make sure you have your machine type, model, and serial number available and the computer is in front of you. Also, if the machine is producing error codes, it is helpful to have the error screen on or the message written down.

## Chapter 3. Getting help and service

If you need help, service, technical assistance, or just want more information about Lenovo computers, you will find a wide variety of sources available from Lenovo to assist you. This section contains information about where to go for additional information about Lenovo computers, what to do if you experience a problem with your computer, and whom to call for service should it be necessary.

Microsoft Service Packs are the latest software source for Windows product updates. They are available by means of a Web download (connection charges may apply) or from a disc. For more specific information and links, go to the Microsoft Web site at <http://www.microsoft.com/>. Lenovo offers Up and Running technical assistance with installation of, or questions related to, Service Packs for your Lenovo-preinstalled Microsoft Windows product.

## Chapter 3. Getting help and service

### ■ ■ Getting help on the Web

The Lenovo Web site on the World Wide Web has up-to-date information about Lenovo computers and support. You can find support information for your Lenovo computer at <http://consumersupport.lenovo.com>. Research this Web site to learn how to solve problems, find new ways to use your computer, and learn about options that can make working with your Lenovo computer even easier.

### ■ ■ Calling the customer support center

If you have tried to correct the problem yourself and still need help, during the warranty period, you can get help and information by telephone through the customer support center. The following services are available during the warranty period:

- Problem determination - Trained personnel are available to assist you with determining if you have a hardware problem and deciding what action is necessary to fix the problem.
- Lenovo hardware repair - If the problem is determined to be caused by Lenovo hardware under warranty, trained service personnel are available to provide the applicable level of service.
- Engineering change management - Occasionally, there might be changes that are required after a product has been sold. Lenovo or your reseller, if authorized by Lenovo, will make selected Engineering Changes (ECs) available that apply to your hardware.

The following items are not covered:

- Replacement or use of parts not manufactured for or by Lenovo or non warranted parts
- Identification of software problem sources
- Changes, modifications, or upgrades to device drivers
- Installation and maintenance of network operating systems (NOS)
- Installation and maintenance of application programs

**Note:** To determine if your Lenovo hardware product is under warranty and when the warranty expires, go to <http://consumersupport.lenovo.com/>.

## Chapter 3. Getting help and service

Refer to your Lenovo hardware warranty for a full explanation of Lenovo warranty terms. Be sure to retain your proof of purchase to obtain warranty service.

If possible, be near your computer when you make your call in case the technical assistance representative needs to help you resolve a computer problem. Please ensure that you have downloaded the most current drivers and system updates, and recorded information before you call. When calling for technical assistance, please have the following information available:

- Machine Type and Model
- Serial number of your computer and your proof of purchase
- Description of the problem
- Hardware and software configuration information for your system

**Note:** For the latest list of customer support center telephone numbers and hours of operation, go to <http://consumersupport.lenovo.com/>. If the number for your country or region is not listed, contact your Lenovo reseller or Lenovo marketing representative.

## Chapter 3. Getting help and service

### ■ ■ Getting help around the world

If you travel with your computer or relocate it to a country where your Lenovo machine type is sold, your computer might be eligible for International Warranty Service, which automatically entitles you to obtain warranty service throughout the warranty period. Service will be performed by service providers authorized to perform warranty service.

Service methods and procedures vary by country, and some services might not be available in all countries. Service centers in certain countries might not be able to service all models of a particular machine type. In some countries, fees and restrictions might apply at the time of service.

**Note:** To determine whether your computer is eligible for International Warranty Service and to view a list of the countries where service is available, go to <http://consumersupport.lenovo.com/>.

### ■ ■ Lenovo product service information for Taiwan

台灣 Lenovo 產品服務資訊如下:  
荷蘭商聯想股份有限公司台灣分公司  
台北市信義區信義路五段七號十九樓之一  
服務電話: 0800-000-700

## Appendix A. Notices

### ■ ■ Notices

Lenovo may not offer the products, services, or features discussed in this document in all countries. Consult your local Lenovo representative for information on the products and services currently available in your area. Any reference to a Lenovo product, program, or service is not intended to state or imply that only that Lenovo product, program, or service may be used. Any functionally equivalent product, program, or service that does not infringe any Lenovo intellectual property right may be used instead. However, it is the user's responsibility to evaluate and verify the operation of any other product, program, or service.

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This information could include technical inaccuracies or typographical errors. Changes are periodically made to the information herein; these changes will be incorporated in new editions of the publication. Lenovo may make improvements and/or changes in the product(s) and/or the program(s) described in this publication at any time without notice.

## Appendix A. Notices

The products described in this document are not intended for use in implantation or other life support applications where malfunction may result in injury or death to persons. The information contained in this document does not affect or change Lenovo product specifications or warranties. Nothing in this document shall operate as an express or implied license or indemnity under the intellectual property rights of Lenovo or third parties. All information contained in this document was obtained in specific environments and is presented as an illustration. The result obtained in other operating environments may vary.

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Any references in this publication to non-Lenovo Web sites are provided for convenience only and do not in any manner serve as an endorsement of those Web sites. The materials at those Web sites are not part of the materials for this Lenovo product, and use of those Web sites is at your own risk.

Any performance data contained herein was determined in a controlled environment. Therefore, the result obtained in other operating environments may vary significantly. Some measurements may have been made on development-level systems and there is no guarantee that these measurements will be the same on generally available systems.

Furthermore, some measurements may have been estimated through extrapolation. Actual results may vary. Users of this document should verify the applicable data for their specific environment.

The software interface and hardware configuration described in all the manuals included with your computer may not match the actual configuration of the computer you purchased.

### ■ Export classification notice

This product is subject to the United States Export Administration Regulations (EAR) and has an Export Classification Control Number (ECCN) of 4A994.b. It can be re-exported except to any of the embargoed countries in the EAR E1 country list.

## Appendix A. Notices

### ■ Wireless related information

#### ■ Wireless interoperability

Wireless LAN PCI Express Mini Card is designed to be interoperable with any wireless LAN product that is based on Direct Sequence Spread Spectrum (DSSS), Complementary Code Keying (CCK), and/or Orthogonal Frequency Division Multiplexing (OFDM) radio technology, and is compliant to:

- The IEEE 802.11a/b/g/n Standard on Wireless LANs, as defined and approved by the Institute of Electrical and Electronics Engineers.
- The Wireless Fidelity (WiFi) certification as defined by the Wi-Fi Alliance.

*Bluetooth* Daughter Card is designed to be interoperable with any *Bluetooth* product that is compliant to *Bluetooth* Specification 2.1 + EDR as defined by the Bluetooth SIG. Following profiles are supported by *Bluetooth* Daughter Card:

- Generic Access
- Service Discovery
- Serial Port
- Dial-up Networking
- FAX
- LAN Access using PPP
- Personal Area Network
- Generic Object Exchange
- Generic Object Push
- File Transfer
- Synchronization
- Audio Gateway
- Headset
- Printer
- Human Interface Devices (Keyboard/Mouse)
- Basic Image
- Handsfree
- AV

## Appendix A. Notices

### ■ Usage environment and your health

Wireless LAN PCI Express Mini Card and *Bluetooth* Daughter Card emit radio frequency electromagnetic energy like other radio devices. However, the level of energy emitted is far much less than the electromagnetic energy emitted by wireless devices like for example mobile phones.

Due to the fact that wireless LAN PCI Express Mini Card and *Bluetooth* Daughter Card operate within the guidelines found in radio frequency safety standards and recommendations, Lenovo believes the integrated wireless cards are safe for use by consumers. These standards and recommendations reflect the consensus of the scientific community and result from deliberations of panels and committees of scientists who continually review and interpret the extensive research literature.

In some situation or environment, the use of wireless LAN PCI Express Mini Card or *Bluetooth* Daughter Card may be restricted by the proprietor of the building or responsible representatives of the organization. These situations may for example include:

- Using the integrated wireless cards on board of airplanes, or in hospitals
- In any other environment where the risk of interference to other devices or services is perceived or identified as harmful.

If you are uncertain of the policy that applies on the use of wireless devices in a specific organization (e.g., airport or hospital), you are encouraged to ask for authorization to use wireless LAN PCI Express Mini Card or *Bluetooth* Daughter Card prior to turning on the computer.

### ■ Safety information related to Mobile Broadband

- ① Do not use the Mobile Broadband feature on your computer in highly flammable areas (e.g. gas station) or near blasting. Though it is rare, the Mobile Broadband module, like other cellular network devices, could generate a spark.
- ② Avoid using Mobile Broadband feature outdoors during a thunderstorm.

## Appendix A. Notices

- ③ Use of mobile devices on board aircraft is explicitly prohibited by many airlines companies, especially during take-off and landing. The built-in Mobile Broadband module on your computer is a low-power radio transceiver. When it is turned on, it intermittently receives and transmits radio frequency (RF) energy which could cause interference with the operation of the airplane communication or navigation system. Refer to rules or regulations of your airline company for Mobile Broadband use. Never enable Mobile Broadband feature on your computer unless you are explicitly permitted to do so.
- ④ Follow restrictions when using your computer in hospitals. Some equipments in hospitals are sophisticated and are susceptible to electromagnetic interference. Do not enable Mobile Broadband feature near medical equipment without requesting permission.
- ⑤ The Mobile Broadband communication may affect the operation of implanted cardiac pacemakers and other medically implanted equipment. Patients with cardiac pacemakers should be well aware that use of Mobile Broadband feature on this computer may cause the implanted device to malfunction. If patients have any doubt that there is interference taking place, immediately disable the wireless radio on the computer and contact the doctor for more information.
- ⑥ The Mobile Broadband module embedded in your computer does not support voice calls, hence their use for essential communications is not possible. Therefore you should never rely upon the device for essential communications.

## Appendix A. Notices

### ■ ■ TV tuner information

#### ■ Products with television tuner options installed

The notice below applies to products containing television (TV) tuner devices that connect to external antennas or to cable/CATV systems, or both, and that are intended to be installed in North America. Users and installers in other countries should follow local codes and ordinances when installing appliances that connect to external antennas and cable/CATV systems. If local codes are not applicable, it is recommended that users/installers follow guidelines similar to those that follow.

The TV tuner should connect to TNV-1 circuit only.

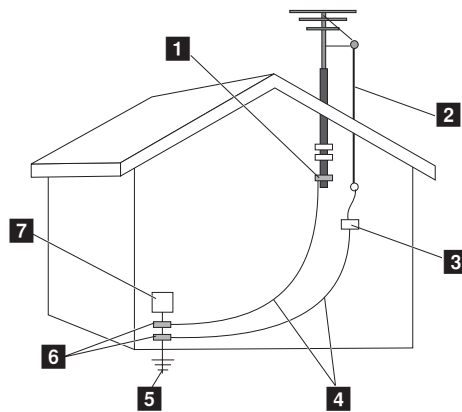
When install the coaxial cable to the TV tuner should make sure its metal shield is reliable connected to protective earthing system of the building.

#### ■ Note to CATV system installer

This reminder is provided to call the CATV system installer's attention to Article 820-40 of the National Electrical Code (NEC) that provides guidelines for proper grounding and, in particular, specifies that the cable ground shall be connected to the grounding system of the building, as close as possible to the point of cable entry as practical.

## Appendix A. Notices

### ■ Example of antenna grounding



- 1** Ground clamp
- 2** Antenna lead-in wire
- 3** Antenna discharge unit (NEC Section 810-20)
- 4** Grounding conductors (NEC Section 810-21)
- 5** Power service grounding electrode system (NEC Article 250, Part H)
- 6** Ground clamps
- 7** Electronic service equipment

The following notice applies to all countries and regions:

#### \* **Danger:**

- **Outdoor antenna grounding**  
If an outside antenna or cable system is connected to the equipment, be sure the antenna or cable system is grounded as to provide some protection against voltage surges and built-up static charges.
- **Lightning**  
For added protection for this equipment during a lightning storm, or when it is left unattended and unused for long periods of time, unplug it from the wall outlet and disconnect the antenna or cable system. This will prevent damage to the video product due to lightning and power line surges.

## Appendix A. Notices

- Power lines

An outside antenna system should not be located in the vicinity of overhead power lines or where it can fall into such power lines or circuits. When installing an outside antenna system, extreme care should be taken to keep from touching such power lines or circuits, as contact with them may be fatal.

### ■ Risk of hazard connecting Class I equipment to cable distribution networks

For Class I equipment in Norway, intended to be connected to cable distribution systems, the screen of a coaxial cable is required to be galvanic isolated from the protective earth.

- Connection to a Cable Distribution System is to be provided through a galvanic isolator.
- Må Kun tilkoples kabel-TV nett via galvanisk isolator.

## Appendix A. Notices

### ■ ■ WEEE and recycling statements

#### ■ General recycling statement

Lenovo encourages owners of information technology (IT) equipment to responsibly recycle their equipment when it is no longer needed. Lenovo offers a variety of programs and services to assist equipment owners in recycling their IT products. Information on product recycling offerings can be found on Lenovo's Internet site at <http://www.lenovo.com/recycling>

#### ■ Turkish statement of compliance

The Lenovo product meets the requirements of the Republic of Turkey Directive on the Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment (EEE).

Bu Lenovo ürünü, T.C. Çevre ve Orman Bakanlığı'nın "Elektrik ve Elektronik Eşyalarda Bazı Zararlı Maddelerin Kullanımının Sınırlandırılmasına Dair Yönetmelik (EEE)" direktiflerine uygundur.  
EEE Yönetmeliğine Uygundur.

#### ■ Declarações de Reciclagem no Brasil

##### Descarte de um Produto Lenovo Fora de Uso

Equipamentos elétricos e eletrônicos não devem ser descartados em lixo comum, mas enviados à pontos de coleta, autorizados pelo fabricante do produto para que sejam encaminhados e processados por empresas especializadas no manuseio de resíduos industriais, devidamente certificadas pelos órgãos ambientais, de acordo com a legislação local.

A Lenovo possui um canal específico para auxiliá-lo no descarte desses produtos. Caso você possua um produto Lenovo em situação de descarte, ligue para o nosso SAC ou encaminhe um e-mail para: [reciclar@lenovo.com](mailto:reciclar@lenovo.com), informando o modelo, número de série e cidade, a fim de enviarmos as instruções para o correto descarte do seu produto Lenovo.

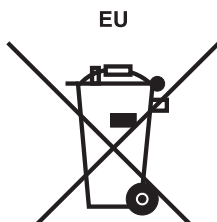
## Appendix A. Notices

### ■ EU WEEE statements

The Waste Electrical and Electronic Equipment (WEEE) mark applies only to countries within the European Union (EU) and Norway. Appliances are labeled in accordance with European Directive 2002/96/EC concerning waste electrical and electronic equipment (WEEE). The Directive determines the framework for the return and recycling of used appliances as applicable throughout the European Union. This label is applied to various products to indicate that the product is not to be thrown away, but rather reclaimed upon end of life per this Directive.

Users of electrical and electronic equipment (EEE) with the WEEE marking per Annex IV of the WEEE Directive must not dispose of end of life EEE as unsorted municipal waste, but use the collection framework available to them for the return, recycle, recovery of WEEE and minimize any potential effects of EEE on the environment and human health due to the presence of hazardous substances. For additional WEEE information go to:  
<http://www.lenovo.com/recycling>.

### ■ Battery recycling marks



## Appendix A. Notices

### ■ Japan recycling statements

#### ■ Collecting and recycling a disused Lenovo computer or monitor

If you are a company employee and need to dispose of a Lenovo computer or monitor that is the property of the company, you must do so in accordance with the Law for Promotion of Effective Utilization of Resources. Computers and monitors are categorized as industrial waste and should be properly disposed of by an industrial waste disposal contractor certified by a local government. In accordance with the Law for Promotion of Effective Utilization of Resources, Lenovo Japan provides, through its PC Collecting and Recycling Services, for the collecting, reuse, and recycling of disused computers and monitors. For details, go to:

<http://www.lenovo.com/recycling/japan>

Pursuant to the Law for Promotion of Effective Utilization of Resources, the collecting and recycling of home-used computers and monitors by the manufacturer was begun on October 1, 2003. This service is provided free of charge for home-used computers sold after October 1, 2003. For details, go to: <http://www.lenovo.com/recycling/japan>

## Appendix A. Notices

### ■ Disposing of a Lenovo computer components

Some Lenovo computer products sold in Japan may have components that contain heavy metals or other environmental sensitive substances. To properly dispose of disused components, such as a printed circuit board or drive, use the methods described above for collecting and recycling a disused computer or monitor.

### ■ Disposing a disused battery pack from Lenovo notebook computers

Your Lenovo notebook computer has a lithium ion battery pack or a nickel metal hydride battery pack. If you are a company employee who uses a Lenovo notebook computer and need to dispose of a battery pack, contact the proper person in Lenovo sales, service, or marketing, and follow that person's instructions. You also can refer to the instructions at

<http://www.lenovo.com/jp/ja/environment/recycle/battery/>.

If you use a Lenovo notebook computer at home and need to dispose of a battery pack, you must comply with local ordinances and regulations. You also can refer to the instructions at

<http://www.lenovo.com/jp/ja/environment/recycle/battery/>.

## Appendix A. Notices

### ■ ■ Notice for users in the U.S.A.

California Perchlorate Information:

Products containing CR (manganese dioxide) lithium coin cell batteries may contain perchlorate.

Perchlorate Material — special handling may apply.

See <http://www.dtsc.ca.gov/hazardouswaste/perchlorate>.

### ■ ■ Japanese VCCI Class B Statement

この装置は、クラスB情報技術装置です。この装置は、家庭環境で使用することを目的としています。この装置がラジオやテレビジョン受信機に近接して使用されると、受信障害を引き起こすことがあります。

取扱説明書に従って正しい取り扱いをして下さい。

VCCI-B

### ■ ■ Japan compliance statement for power line harmonics

A statement of compliance to the IEC 61000-3-2 harmonics standard is required for all products connecting to the power mains and rated less than 20A per phase.

日本の定格電流が 20A/相 以下の機器に対する高調波電流規制  
高調波電流規格 JIS C 61000-3-2 適合品

## Appendix A. Notices

### ■ Korea Class B

B급 기기(가정용 방송통신기자재)

이 기기는 가정용(B급) 전자파적합기기로서 주로  
가정에서 사용하는 것을 목적으로 하며, 모든 지  
역에서 사용할 수 있습니다

### ■ Ukraine RoHS

Цим підтверджуємо, що продукція Леново відповідає вимогам  
нормативних актів України, які обмежують вміст небезпечних речовин.

## Appendix A. Notices

### ■ ■ Notice on deleting data from your hard disk

As computers spread into every corner of life, they process more and more information. The data on your computer, some of it sensitive, is stored on a storage device called the hard disk. Before you dispose of, sell, or hand over your computer, you need to delete that data.

Handing your computer over to someone else without deleting the loaded software, such as operating systems and application software, may even violate License Agreements. You are advised to check the terms and conditions of those Agreements.

Deleting the data from the hard disk is not easy.

There are methods that seem to delete the data:

- Move the data to the recycle bin, and then choose the Empty recycle bin command.
- Use the Delete command.
- Format your hard disk, using the software for initializing it.
- Using the preinstalled recovery program, bring the hard disk back to factory-ship state.

These operations, however, only change the file allocation of the data; they do not delete the data itself. In other words, the data retrieval processing is disabled under an operating system such as Windows. The data is still there, even though it seems to be lost. Thus, it is sometimes possible to read the data by use of special software for data recovery. There is a risk that people of bad faith may read and misuse the critical data on hard disks for unexpected purposes.

To prevent the leakage of data, it becomes very important that you take responsibility for deleting all the data from the hard disk when you dispose of, sell, or hand over your computer. You can destroy the data physically by smashing the hard disk with a hammer, or magnetically by means of strong magnetic power, thus making the data unreadable. But we recommend that you make use of the software (payware) or service (pay service) specifically developed for the purpose.

## Trademarks

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