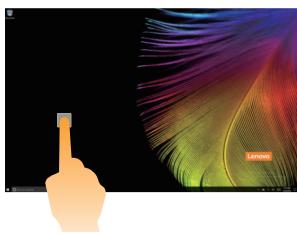


■ Touch screen operation

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

■ Multi-touch gestures

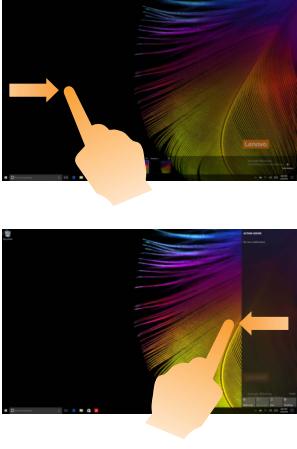
You can touch the screen with one or more fingertips to perform a variety of tasks.

Frequently used gestures	Tasks performed
<p>Tap</p> <p>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>Press and hold</p> <p>Press your finger down and leave it there for a moment.</p> 	<p>Enables 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>

(continued)

Frequently used gestures	Tasks performed
<p>Zoom</p> <p>Move two fingers together or apart while touching the screen.</p> 	<p>Zooms in and out on visual apps, such as pictures and maps. Can also jump to the beginning or end of a list.</p>
<p>Rotate</p> <p>Place two or more fingers on an item and then turn your hand.</p> 	<p>Rotates an object (Note: Not all items can be rotated, depending upon the app.).</p>
<p>Slide</p> <p>Drag your finger across the screen.</p> 	<p>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.</p>

(continued)

Frequently used gestures	Tasks performed
<p>Swipe</p> <p>Start from left/right edge of the screen, then swipe inwards toward the center.</p> 	<p>Swiping in from the left edge of the screen can open the task view.</p> <p>Swiping in from the right edge of the screen displays the action center.</p>

Chapter 3. Recovery system

■ ■ ■ **Reset this PC**

■ **Introduction**

Reset this PC is a built-in recovery tool that enables users to restore their operating system to its original state. This preserves their data and important customizations, without the need to back up their data in advance.

The following **Reset this PC** features are available to users from multiple locations within Windows:

Keep my files

Fixes software problems by reinstalling the factory default configuration. This preserves personal files, and deletes apps and settings.

Remove everything

Prepares the computer for recycling or transfer of ownership. This reinstalls the factory default configuration and returns all user data and applications to the state of their original Out-of-Box Experience (OOBE).

■ **Using Reset this PC**

Reset this PC can be launched using one of the following methods:

- Novo Menu:
 - Press the Novo button to open the Novo Menu, then select **System Recovery** → **Troubleshoot** → **Reset this PC**.
- Windows PC settings:
 - Windows PC settings → **Update & security** → **Recovery** → **Reset this PC** → select **Start**.

For more instructions, see the Windows Help and Support file on your computer.

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?

Read and follow all safety precautions included in *Lenovo Safety and General Information Guide*.

Note: To view *Lenovo Safety and General Information Guide*, select the **Companion** (or **Lenovo PC Manager**) icon on the taskbar. You can also download it from the *Lenovo Support* Web site.

What is the address of the *Lenovo support* Web site?

<http://support.lenovo.com>

Where can I find warranty information?

Visit the *Lenovo Support* Web site and type the serial number for your computer to look up warranty information.

■ Lenovo preinstalled operating system and software

What is the *Lenovo preinstalled operating system*?

Some *Lenovo* computers come with copies of the operating system installed at factory. *Lenovo* provides computers with preinstalled operating system for your convenience. If you purchased such a computer, you can use your computer out of the box and do not need to install a separate operating system.

What is *Lenovo preinstalled software*?

This is software (developed by *Lenovo* or other software vendors) installed and licensed at factory for your convenience. The license for some preinstalled software may be for trial versions. When the trial period expires, you may need to purchase a license if you want to continue to use the software.

Note: If a license agreement is displayed when you first start the software, read the agreement carefully. If you don't accept the terms of the agreement, do not use the software.

When I purchased my computer, it included a copy of Windows. How can I determine whether the copy of Windows is preinstalled by *Lenovo*?

On the outside of the sales package of your computer, you should find a label containing configuration information for your computer. Check the printed string next to **OS**. If it contains **Windows** or **WIN**, the copy of Windows was preinstalled by *Lenovo*.

Chapter 4. Troubleshooting

I uninstalled a preinstalled software, but there is no significant increase in the free drive space.

The copy of Windows running on your computer may be Compact-enabled. For computers with Compact-enabled Windows, the majority of files needed for preinstalled software are installed on the Recovery Partition and won't be deleted through normal uninstallation.

How can I determine whether the Windows running on my computer is Compact enabled?

Compact technology is normally enabled on copies of Windows 10 Update running on SSD (or eMMC) -only computer models. To check your computer,

- ① Right-click the Start button in the lower-left corner and select **Disk Management**.
- ② The Disk Management program starts.

If **Compact** is labeled on the Windows partition, Compact is enabled on your copy of Windows.

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

If your computer is preinstalled with a Windows operating system, first check the installation program on the C partition of your hard disk. If you cannot find the drivers for all the hardware devices that you need there, download the drivers from the Lenovo consumer support website.

Note: The Lenovo support Web site contains the latest drivers.

■ BIOS setup utility

What is the BIOS setup utility?

The BIOS setup utility is ROM-based software. It communicates 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:

- ① Shut down the computer.
- ② Press the Novo button and then select **BIOS Setup**.

How can I change the boot mode? (on select models)

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

When do I need to change the boot mode? (on select models)

The default boot mode for your computer is **UEFI First** mode. If you need to install a legacy Windows operating system 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" of *Lenovo Safety and General Information Guide*.

Troubleshooting

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 plugged into a working electrical outlet.
 - The computer power is on. Press the Power button again for confirmation.

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 Reset this PC. If you still see only the cursor on the screen, have the computer serviced.

The screen goes blank while the computer is on.

- Your screen saver or power management may be enabled. Do one of the following to resume from sleep mode:
 - Press any key on the keyboard. (Notebook mode only)
 - Press the Power button.

Sleep 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 self-test (POST).

- Make sure that:
 - The battery pack 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 pack is charged and the temperature is within range, have the computer serviced.

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

- If your computer is in sleep mode, connect the AC power adapter to the computer, then press the Power button.
- If the system still does not return from sleep mode, stops responding, or cannot be turned off, reset the computer. Unsaved data may be lost. To reset the computer, press and hold the Power button for eight seconds or more. If the computer is still not reset, remove the AC power adapter.

Chapter 4. Troubleshooting

Display panel problems

The screen is blank.

- Do the following:
 - If you are using the AC power adapter or the battery pack, 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."

The screen is unreadable or distorted.

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

Battery pack 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.

Other problems

Your computer does not respond.

- To turn off your computer, press and hold the Power button for eight 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.

Trademarks

Lenovo is a trademark or registered trademark of Lenovo in the United States, other countries, or both.

Microsoft and Windows are trademarks of Microsoft Corporation in the United States, other countries, or both.

Other company, products, or service names may be trademarks or service marks of others.

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.

■ **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.

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.

Lenovo limited warranty

■ 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
- 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.

■ **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/.

■ **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

Lenovo limited warranty

■ 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.

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 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.

Lenovo limited warranty

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.

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.

■ ■ ■ Part 3 - Warranty Service Information

Product or machine type	Country or region of purchase	Warranty period	Types of warranty service
Notebook: 81B5	Taiwan, Korea		3, 4
	China (Hong Kong S.A.R.), China (Macau S.A.R.), India, Indonesia, Malaysia, Thailand, Philippines, Vietnam, Sri Lanka, Singapore		1, 4
	Argentina, Colombia, Peru, Venezuela, Bolivia, Uruguay, Chile, Paraguay, Ecuador, Mexico		
	Austria, Iceland, Israel, Ireland, Italy, the United Kingdom		
	Canada, United States of America		1, 3
	Japan, Australia, New Zealand		
	Brazil	parts and labor - 1 year	
	Moldova	battery pack - 1 year	
	Russia, Ukraine, the Republic of Kazakhstan, Belarus, Azerbaijan, Georgia, Armenia, Uzbekistan, Tajikistan, Kyrgyzstan, Mongolia		
	South Africa, Kenya, Nigeria, Uganda, Morocco, Tunisia, Algeria, Cote d'Ivoire, Angola, UAE, Bahrain, Jordan, Kuwait, Lebanon, Qatar, Botswana, Oman, Egypt, Pakistan, Cameroon, Democratic Republic of Congo, Djibouti, Ethiopia, Ghana, Iraq, Malta, Mauritania, Mauritius, Mozambique, Namibia, Rwanda, Senegal, Seychelles, Tanzania, Yemen, Zambia, Zimbabwe		4
	Germany	parts and labor - 1 or 2 years battery pack - 1 year	1, 3

(continued)

Product or machine type	Country or region of purchase	Warranty period	Types of warranty service
Notebook: 81B5	Denmark, Estonia, Finland, Norway, Latvia, Lithuania, Portugal, Spain, Sweden, Belgium, Luxembourg, Netherlands, Switzerland, France		1, 3
	Hungary, Romania, Bulgaria, Czech Republic, Slovakia	parts and labor - 2 years battery pack - 1 year	
	Bosnia-Herzegovina, Croatia, Cyprus, Greece, Macedonia, Slovenia, Serbia/Montenegro, Albania, Poland		1, 4
	Saudi Arabia		4
	Turkey	parts and labor - 2 years battery pack - 2 years	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.

■ 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. 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.

Lenovo limited warranty

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.

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 numbers. 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.

- 81B5

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:

Product specific Notices

Table 1. ENERGY STAR power-management features

Windows® 10
Power plan: balanced (plugged in)
• Turn off the display: After 10 minutes
• Put the computer to sleep:
After 30 minutes
• Advanced power settings:
- Turn off hard disks:
After 20 minutes

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.

■ **Electronic emissions notices**

The following information refers to Lenovo YOGA 720-12IKB, machine type 81B5.

■ **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

CAN ICES-3(B)/NMB-3(B)

■ 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, Meitnerstr. 9, 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.

■ European Union Compliance Statement Class B Compliance

European Union - Compliance to the Electromagnetic Compatibility (EMC) Directive or Radio Equipment Directive

Models without a radio device: This product is in conformity with the protection requirements of EU Council Directive 2004/108/EC (until 19 April, 2016) and Council Directive 2014/30/EU (from 20 April, 2016) on the approximation of the laws of the Member States relating to electromagnetic compatibility.

Models with a radio device: This product is in conformity with all the requirements and essential norms that apply to EU Council Directive (R&TTE Directive) 1999/5/EC. European Council Directive 1999/5/EC remains in force during the transition period of European Council Directive 2014/53/EU until 12 June, 2017 on the approximation of the laws of the Member States relating to radio equipment.

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 equipment according to European Standards harmonized in the Directives in compliance. The limits for Class B equipment were derived for typical residential environments to provide reasonable protection against interference with licensed communication devices.

Lenovo, Einsteinova 21, 851 01 Bratislava, Slovakia



■ Export Control Classification Notice (ECCN)

This product is subject to the United States Export Administration Regulations (EAR) and has an Export Classification Control Number (ECCN) of 5A992.c. It can be re-exported except to any of the embargoed countries in the EAR E1 country list.

Specifications

Model Name: **Lenovo YOGA 720-12IKB**

Machine Type: **81B5**

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. 293 mm × 203.4 mm × 15.75 mm
Weight	Appr. 1.18 kg
LCD size	12.5-inch

Processor

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

Memory

Type and speed	DDR4-2133MHz
Maximum supported capacity	12 GB

SSD

Capacity	128 GB, 256 GB, 512 GB
Interface	SATA

Display

Display resolution (LCD)	1,920 × 1,080 pixels FHD
LCD backlight	LED
Touch Screen	Multi-touch screen

I/O Ports

USB	USB 3.0 × 1
Audio	Combo audio jack × 1
Type-C	Type-C × 1 (compatible with USB 3.0 & DisplayPort)

Battery pack

Type	Li-ion battery pack
Cells/Capacity	3 cells, 36 Wh

Note: The capacity given here is the typical or average capacity as measured in a specific test environment. Capacities measured in other environments may differ but are no lower than the rated capacity (see product label).

AC power adapter

Input	100-240 V, 50-60 Hz AC
Output voltage	20 V DC
Power	45 W / 65 W

Miscellaneous

Camera	1M, HD (720P)
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Trademarks

Lenovo is a trademark or registered trademark of Lenovo in the United States, other countries, or both.

Microsoft and Windows are trademarks of Microsoft Corporation in the United States, other countries, or both.

Other company, products, or service names may be trademarks or service marks of others.

Lenovo YOGA 720-12IKB

Regulatory Notice

Lenovo™

■ ■ ■ **Lenovo regulatory notice for wireless adapters**

This manual contains regulatory information for the following Lenovo product:

- Lenovo YOGA 720-12IKB

The following wireless modules are supported on Lenovo YOGA 720-12IKB:

- 3165NGW
- 8265NGW
- QCNFA435
- QCNFA344A

■ **Read first — regulatory information**

Please read this document before you use your Lenovo computer. Your 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 votre ordinateur Lenovo. Votre ordinateur Lenovo est conforme aux normes de sécurité et de radiofréquence du pays ou de la région où son utilisation sans fil est approuvée. 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 + Bluetooth Combo module

- FCC ID: PD93165NG (Model: 3165NGW)
- FCC ID: PD98265NG (Model: 8265NGW)
- FCC ID: PPD-QCNFA435 (Model: QCNFA435)
- FCC ID: PPD-QCNFA344AH (Model: QCNFA344A)

The following wireless LAN modules marketed in the USA and Canada do not support or function in the extended channels (Ch. 12, Ch. 13):

- Models: QCNFA435, QCNFA344A

i) The FCC RF Exposure compliance:

The radiated output power of the Wireless LAN + Bluetooth Combo 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:

Caution: The total radiated energy from the antennas connected to the installed wireless LAN module, conforms to the FCC limit of the SAR (Specific Absorption Rate) requirement, regarding 47 CFR Part 2 section 1093, when the computer was tested in either conventional notebook or tablet computer orientations.

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 + Bluetooth Combo 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.

When you use a Wireless LAN + Bluetooth Combo module in the 802.11 a/n transmission mode:

- High power radars are allocated as primary users of the 5250 to 5350 MHz and 5650 to 5850 MHz bands. These radar stations can cause interference with and/or damage this device.

II. Simultaneous use of RF transmitters

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 + Bluetooth Combo modules:

- IC: 1000M-3165NG (Model: 3165NGW)
- IC: 1000M-8265NG (Model: 8265NGW)
- IC: 4104A-QCNFA435 (Model: QCNFA435)
- IC: 4104A-QCNFA344A (Model: QCNFA344A)

The following wireless LAN modules marketed in the USA and Canada do not support or function in the extended channels (Ch. 12, Ch. 13):

- Models: QCNFA435, QCNFA344A

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, RSS-247):

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.

When you use a Wireless LAN and Bluetooth Combo module adapter in the 802.11 a/n transmission mode:

- The devices for the band 5150-5350 MHz are only for indoor usage to reduce potential for harmful interference to co-channel Mobile Satellite systems.
- High power radars are allocated as primary users (meaning they have priority) of 5250-5350 MHz and 5650-5850 MHz bands and these radars could cause interference and/or damage to LE-LAN (Licence-Exempt Local Area Network) devices.
- The maximum antenna gain permitted for devices in the 5250-5350 MHz, 5470-5725 MHz, and 5725-5825 MHz bands complies with the e.i.r.p. limit.

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

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 5, Section 4.

Numéro d'homologation IC

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

- IC: 1000M-3165NG (Model: 3165NGW)
- IC: 1000M-8265NG (Model: 8265NGW)
- IC: 4104A-QCNFA435 (Model: QCNFA435)
- IC: 4104A-QCNFA344A (Model: QCNFA344A)

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, CNR-247):

Le fonctionnement de ce type d'appareil est soumis aux deux conditions suivantes:

1. Cet appareil ne doit pas perturber les communications radio, et
2. cet appareil doit supporter toute perturbation, y compris les perturbations qui pourraient provoquer son dysfonctionnement.

Lorsque vous utilisez un module adaptateur LAN sans fil et Bluetooth Combo dans le 802,11 un mode de transmission / n :

- Les dispositifs pour la bande 5150-5350 MHz ne sont que pour une utilisation en intérieur pour réduire potentiel d' interférences nuisibles à la co-canal systèmes satellite mobile .
- Les radars à haute puissance sont désignés comme utilisateurs principaux (ce qui signifie qu'ils ont la priorité) des bandes 5250- 5350 MHz et 5650-5850 MHz et ces radars pourraient provoquer interférences et / ou des dommages à LE-LAN (exempté de licence Local Area Network) appareils.
- 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.r.e (puissance isotrope rayonnée équivalente).

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/".

L' énergie rayonnée par les antennes connectées aux adaptateurs sans fil est conforme à la IC limite de l'exigence de l'exposition aux RF IC concernant CNR- 102, Issue 5, Section 4.

■ Electronic emission notices

Federal Communications Commission (FCC) Statement

- Models: 3165NGW, 8265NGW, QCNFA435 and QCNFA344A.

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



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