

ThinkPad

User Guide

ThinkPad Tablet 2

Notes: Before using this information and the product it supports, be sure to read the following:

- *Safety, Warranty, and Setup Guide*
- *Regulatory Notice*
- “Important safety and handling information” on page iii
- Appendix C “Notices” on page 65

The *Safety, Warranty, and Setup Guide* and the *Regulatory Notice* have been uploaded to the Web site. To refer to them, go to <http://www.lenovo.com/ThinkPadUserGuides>.

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Contents

Read this first	iii	Using the micro SD card reader	23
Important safety and handling information	iii	Using HDMI devices	24
Chapter 1. Product overview	1	Using synchronization solutions	25
Tablet layout	1	Sharing your Internet connection	25
Front and side view	1	Using the GPS satellite receiver	26
Back-side view.	3	Chapter 6. ThinkPad Tablet 2 options	27
Accessories.	4	ThinkPad Tablet 2 Bluetooth Keyboard with Stand	27
Features	4	ThinkPad Tablet 2 Dock	28
Specifications	5	Using the Bluetooth keyboard.	29
Operating environment	6	Using the ThinkPad Tablet 2 Dock	30
Chapter 2. Getting started	7	Chapter 7. Security	33
Initial setup instructions	7	Using passwords.	33
Using the multitouch screen	7	Passwords and sleep mode.	33
Using the onscreen keyboard	8	Supervisor password	33
Using the touch keyboard and handwriting panel	8	Setting the security chip	34
Using the Tablet Digitizer Pen	8	Using firewalls	35
Checking for installed applications.	9	Protecting data against viruses	35
Downloading games and applications	10	Chapter 8. Recovery overview	37
Chapter 3. Wireless networks and devices	11	Refreshing your tablet.	37
Installing the SIM card.	11	Restoring your tablet to the factory default state	37
Determining which mobile network you are using	12	Advanced startup options	38
Connecting to a mobile data network.	12	Chapter 9. Advanced configuration.	39
Connecting to a Wi-Fi network	13	Installing device drivers	39
Using Bluetooth devices	14	ThinkPad Setup	39
Chapter 4. Battery and ac power	17	Main menu	39
Charging the battery	17	Date and Time menu	40
Extending the battery life between charges	18	Security menu	40
Checking the battery status	19	Startup menu	42
Chapter 5. Using your tablet	21	Restart menu	43
Browsing the Internet	21	Updating your system UEFI BIOS	43
Using your tablet for entertainment.	21	Using system management.	43
Using headphones or earphones.	21	System management	44
Using the cameras	21	Setting management feature	44
Viewing pictures and watching videos.	22	Chapter 10. You and your tablet	45
Listening to music	22	Comfort and accessibility	45
Reading books.	22	Using your tablet more comfortably	45
Working with Email	22	Accessibility information	45
Using the screen capture function	22	Getting updates	45
Working with USB devices	23	Traveling with your tablet.	46
Using the dc-in connector	23	Travel tips.	46
Using the USB connector	23		

Travel accessories	46
Care and maintenance	47
Chapter 11. Troubleshooting problems	49
Troubleshooting	49
Recovering from a severe software problem . . .	50
Error messages	50
Errors without messages.	51
Chapter 12. Getting support	53
Lenovo technical support	53
Lenovo user forums.	54
Finding ThinkPad options	54
Appendix A. Regulatory information	55
Wireless related information	55
Location of the UltraConnect wireless antennas	56
Export classification notice.	56
Electronic emission notices.	56
Federal Communications Commission (FCC) Declaration of Conformity	56
Industry Canada Class B emission compliance statement	57
European Union - Compliance to the Electromagnetic Compatibility Directive . . .	57
German Class B compliance statement . . .	57
Korea Class B compliance statement	58
Japanese VCCI Class B statement	58

Japan compliance statement for products which connect to the power mains with rated current less than or equal to 20 A per phase .	58
Lenovo product service information for Taiwan	59
Additional regulatory information	59

Appendix B. Environmental, recycling, and disposal information .	61
Lenovo recycling statement	61
Japan recycling statements	61
Recycling information for Brazil	62
Important WEEE information	62
Battery recycling information for Taiwan.	63
Battery recycling information for the United States and Canada.	63
Battery recycling information for the European Union	63
China recycling information for Waste Electrical and Electronic Equipment (WEEE)	64


Appendix C. Notices.	65
Trademarks	66

Appendix D. Restriction of Hazardous Substances Directive (RoHS)	67
China RoHS.	67
Turkish RoHS	67
Ukraine RoHS	67
India RoHS	68

Read this first

Be sure to follow the important tips given here to get the most use and enjoyment out of your tablet. Failure to do so might lead to discomfort or injury, or cause your tablet to fail.

Important safety and handling information

	<p>To avoid personal injury, property damage, or accidental damage to your ThinkPad® Tablet 2 (hereafter referred to as the tablet), read all of the information in this section before using it.</p> <p>For detailed operating instructions, refer to the <i>ThinkPad Tablet 2 User Guide</i> (this publication). You can access the <i>ThinkPad Tablet 2 User Guide</i> by using one of the following methods:</p> <ul style="list-style-type: none">• Go to http://www.lenovo.com/ThinkPadUserGuides and follow the instructions on the screen.• Start your tablet. Tap Lenovo Support on the Start screen. Then tap User Guide.• Open Windows® Help and Support. Then tap User Guide. <p>For additional tips to help you operate your tablet safely, go to: http://www.lenovo.com/safety</p>
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Handle your tablet with care:

Do not drop, bend, puncture, insert foreign objects, or place heavy objects on your tablet. Sensitive components inside might become damaged.

Your tablet screen is made of glass. The glass might break if the tablet is dropped on a hard surface, is the subject of a high impact, or is crushed by a heavy object. If the glass chips or cracks, do not touch the broken glass or attempt to remove it from the tablet. Stop using the tablet immediately and contact Lenovo® technical support for repair, replacement, or disposal information.

Do not disassemble or modify your tablet:

Your tablet is a sealed unit. There are no end-user serviceable parts inside. All internal repairs must be done by a Lenovo-authorized repair facility or a Lenovo-authorized technician. Attempting to open or modify your tablet will void the warranty.

Do not attempt to replace the internal battery:

Replacement of the internal rechargeable battery must be done by a Lenovo-authorized repair facility or a Lenovo-authorized technician. Lenovo-authorized repair facilities or technicians recycle Lenovo batteries according to local laws and regulations.

Prevent your tablet and adapter from getting wet:

Do not immerse your tablet in water or leave it in a location where it can get saturated with water or other liquids.

Use approved charging methods only:

You can use any of the following charging methods to safely recharge the internal battery of your tablet:

Charging method	Tablet on (Display is on)	Tablet off or in screen lock mode (Display is off)
ThinkPad Tablet 2 Dock (fastest charging method)	Approved	Approved
ThinkPad Tablet AC Adapter	Approved, but the battery will charge slowly	Approved
ThinkPad Tablet DC Adapter	Approved, but the battery will charge slowly	Approved
A USB connection between the dc-in connector on the tablet and a USB connector of a personal computer or other device that complies with the USB 2.0 standards (slowest charging method)	This charging method will compensate the power consumption. The battery will discharge more slowly than usual.	Approved, but the battery will charge slowly

Charging devices might become warm during normal use. Ensure that you have adequate ventilation around the charging device. Unplug the charging device if any of the following occurs:

- The charging device has been exposed to rain, liquid, or excessive moisture.
- The charging device shows signs of physical damage.
- You want to clean the charging device.

Lenovo is not responsible for the performance or safety of products not manufactured or approved by Lenovo.

Prevent hearing damage:

Your tablet has a headphone connector. Always use the headphone connector for headphones (also called a headset) or earphones.

CAUTION:

Excessive sound pressure from earphones and headphones can cause hearing loss. Adjustment of the equalizer to maximum increases the earphone and headphone output voltage and the sound pressure level. Therefore, to protect your hearing, adjust the equalizer to an appropriate level.

Excessive use of headphones or earphones for a long period of time at high volume can be dangerous if the output of the headphone or earphone connectors do not comply with specifications of EN 50332-2. The headphone output connector of your tablet complies with EN 50332-2 Sub clause 7. This specification limits the tablet'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 tablet came with headphones or earphones in the package, as a set, the combination of the headphones or earphones and the tablet 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.

Take care when using your tablet in a motor vehicle or on a bicycle:

Always prioritize your safety and the safety of others. Follow the law. Local laws and regulations might govern how you can use mobile electronic devices, such as your tablet, while you drive a motor vehicle or ride a bicycle.

Dispose according to local laws and regulations:

When your tablet reaches the end of its useful life, do not crush, incinerate, immerse in water, or dispose of your tablet in any manner contrary to local laws and regulations. Some internal parts contain substances that can explode, leak, or have an adverse environmental affect if disposed of incorrectly.

See Appendix B “Environmental, recycling, and disposal information” on page 61 for additional information.

Keep your tablet and accessories away from small children:

Your tablet contains small parts that can be a choking hazard to small children. Additionally, the glass screen can break or crack if dropped on or thrown against a hard surface.

Protect your data and software:

Do not delete unknown files or change the name of files or directories that were not created by you; otherwise, your tablet software might fail to work.

Be aware that accessing network resources can leave your tablet vulnerable to computer viruses, hackers, spyware, and other malicious activities that might damage your tablet, 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.

Keep electrical appliances such as an electric fan, radio, high-powered speakers, air conditioner, and microwave oven away from your tablet because the strong magnetic fields generated by these appliances can damage the screen and the data on the tablet.

Be aware of heat generated by your tablet:

When your tablet is turned on or the battery is charging, some parts might become hot. The temperature that they reach depends on the amount of system activity and the level of charge in the battery. Extended contact with your body, even through clothing, could cause discomfort or even a skin burn. Avoid keeping your hands, your lap, or any other part of your body in contact with a hot section of the tablet for any extended time.

Polyvinyl Chloride (PVC) cable and cord notice

WARNING: 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.***

Chapter 1. Product overview

This chapter provides an overview of the tablet, including the locations of the connectors and controls, tablet features, accessories, specifications, and operating environment.

Tablet layout

This topic introduces the tablet hardware features to give you the basic information you will need to start using the tablet.

Front and side view

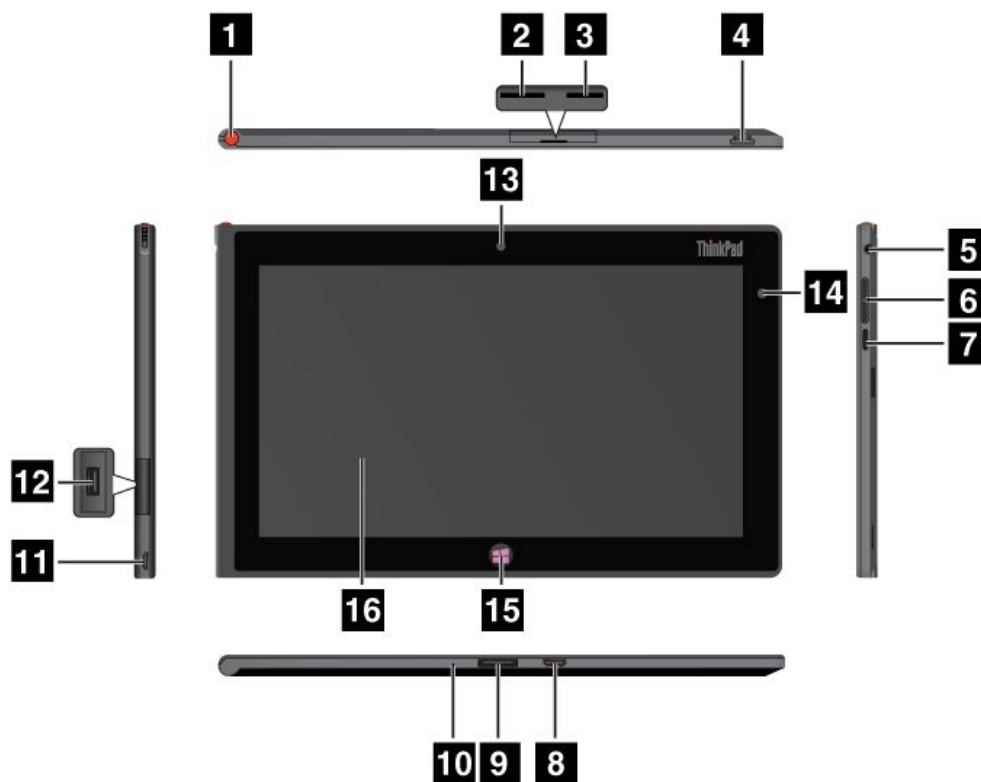


Figure 1. ThinkPad Tablet 2 front and side view

1 Tablet Digitizer Pen storage	9 ThinkPad Tablet 2 Dock connector
2 SIM card slot	10 Emergency reset hole
3 Micro SD card reader	11 dc-in connector
4 Power button	12 USB connector
5 Headphone or microphone connector	13 Front-facing camera
6 Volume control buttons	14 Ambient light sensor

7 Screen rotation lock button	15 Windows button
8 Mini HDMI connector	16 Multitouch screen

1 Tablet Digitizer Pen storage

If your tablet is shipped with a Tablet Digitizer Pen or you have purchased one, use the storage slot to store it.

2 SIM card slot

Open the cover to access the Subscriber Identification Module (SIM) card slot. Insert a SIM card to establish a wireless Wide Area Network (WAN) connection. For instructions on how to install the SIM card, see “Installing the SIM card” on page 11.

Note: The SIM card slot is not functional on Wi-Fi-only models.

3 Micro SD card reader

Open the cover to access the micro SD card reader. Install a secure digital (SD) card into the micro SD media card reader for data access or storage. See “Using the micro SD card reader” on page 23 for more information.

4 Power button

Press the power button to turn on the tablet.

If your tablet stops responding and you cannot turn it off, press and hold the power button for four seconds or more.

5 Headphone or microphone connector

Connect headphones to the connector to listen to stereo sound from the tablet or connect a microphone to record audio or make calls. You also can connect a headset with an integrated microphone that uses a combined audio/microphone connector.

6 Volume control buttons

Press the volume up or down button to adjust the tablet volume.

7 Screen rotation lock button

Press the button to disable the screen auto-rotation function. Press again to enable it.

8 Mini HDMI connector

Your tablet has a mini high-definition multimedia interface (HDMI) connector, a digital audio and video interface that can connect a compatible digital audio device or video display such as a high definition television (HDTV). For more information, see “Using HDMI devices” on page 24.

9 ThinkPad Tablet 2 Dock connector

Use this connector to connect a ThinkPad Tablet 2 Dock. The ThinkPad Tablet 2 Dock is available as an option from Lenovo at <http://www.lenovo.com/accessories/services/index.html>. For more information, see “Using the ThinkPad Tablet 2 Dock” on page 30.

10 Emergency reset hole

If your tablet stops responding and you cannot turn it off or turn it on by pressing and holding the power button, reset the tablet by inserting a straightened paper clip into the emergency reset hole.

11 dc-in connector

You can use the supplied USB cable and the ac adapter to charge the tablet when the battery power is low. See “Charging the battery” on page 17.

12 USB connector

Open the USB connector cover to access the USB connector. Use the USB connector to connect a compatible USB device, such as a USB mouse, USB keyboard, or USB memory key. See “Using the USB connector” on page 23.

13 Front-facing camera

Your tablet has a 2-megapixel front-facing camera, which you can use to take pictures, create videos, or make video calls in collaboration with Web applications. For more information, see “Using the cameras” on page 21.

14 Ambient light sensor

The ambient light sensor detects the brightness of the environment. The screen brightness automatically adjusts depending on the ambient light conditions detected by the built-in ambient light sensor.

15 Windows button

Press the Windows button to go to the Start screen at any time.

16 Multitouch screen

Tap the screen to use the controls on the screen including icons, menu items, and the onscreen keyboard. For more information, see “Using the multitouch screen” on page 7.

Back-side view

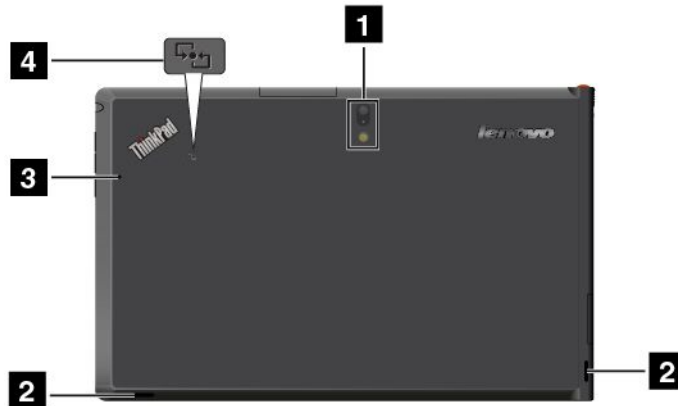


Figure 2. ThinkPad Tablet 2 back-side view

1 Rear-facing camera with an integrated flash	3 Microphone
2 Speakers	4 Near Field Communication (NFC) logo (on some models)

1 Rear-facing camera with flash

Your tablet has an 8-megapixel rear-facing camera with an integrated flash, which you can use to take pictures and create videos. For more information, see “Using the cameras” on page 21.

2 Speakers

The integrated speakers provide audio output for video and music playback.

3 Microphone

The built-in microphone captures sound and voice when it is used with an application capable of handling audio.

4 Near Field Communication (NFC) logo (on some models)

If your tablet comes with the NFC feature, the NFC logo is on the bottom cover.

Accessories



Figure 3. Accessories

- **ThinkPad Tablet AC Adapter and the USB cable:** Use the ac adapter together with the supplied USB cable to provide ac power to your tablet and charge the battery.
- **Tablet Digitizer Pen (for some models):** If your tablet is equipped with a Tablet Digitizer Pen, use it to input text or draw graphics in a natural manner and perform other operations without tapping the screen with your finger. For more information, see “Using the Tablet Digitizer Pen” on page 8 .

Features

Processor

- Intel® Atom™ processor Z2760 1.8GHz with Intel Burst Technology, 1.5GHz HFM, 600MHz LFM

Operating system

- Microsoft® Windows 8 (32 bit)

Memory

- 2 GB

Internal storage

- 64 GB
- 32 GB

Display

- Chemically strengthened glass
- Size: 257 mm (10.1 inches)

- Screen resolution: 1366 x 768 pixels
- Automatic brightness control
- In-Plane Switching technology
- Light Emitting Diode (LED) backlight technology
- Multitouch technology
- Support for the ThinkPad Digitizer Pen input

Integrated cameras

- Front-facing camera, 2 megapixel
- Rear-facing camera with an integrated flash, 8 megapixel

Connectors

- One mini HDMI connector
- One USB 2.0 connector
- One dc-in connector
- One ThinkPad Tablet 2 Dock connector
- One headphone or microphone connector

Card slot or card reader

- SIM card slot
- Micro SD card reader

GPS and wireless features

- Global Positioning System (GPS) satellite receiver
- Bluetooth 4.0
- NFC (on some models)
- Wireless LAN (802.11a/g/n)
- Wireless WAN (on some models)

Specifications

Size

- Width: 262.6 mm (10.3 inches)
- Depth: 164.6 mm (6.48 inches)
- Height: 9.8 mm (0.39 inches)

Battery

- 30 Wh Li-Polymer battery

Power source (ac adapter)

- Sine-wave input at 50 to 60 Hz
- Input rating of the ac adapter: 100 V ac to 240 V ac

Operating environment

- Maximum altitude without pressurization: 3048 m (10 000 ft)
- Temperature:
 - At altitudes up to 2438 m (8000 ft)
 - Operating: 5.0°C to 35.0°C (41°F to 95°F)
 - Storage: 5.0°C to 43.0°C (41°F to 109°F)
 - At altitudes above 2438 m (8000 ft)
 - Maximum temperature when operating under unpressurized conditions: 31.3°C (88°F)
- Relative humidity:
 - Operating: 8% to 80%
 - Storage: 5% to 95%

If possible, place your tablet in a dry, well-ventilated area without direct exposure to sunshine. Do not use or store your tablet in dusty, dirty areas, or extreme hot or cold areas.

Chapter 2. Getting started

This chapter helps you quickly start using your tablet.

Initial setup instructions

To use the tablet the first time after you take it out of the box, ensure that you follow the instructions below:

1. Use the supplied USB cable and ThinkPad Tablet AC Adapter to connect the tablet to an electrical outlet.
2. Press the power button to turn on the tablet.
3. Follow the onscreen instructions to complete the initial setup.

Using the multitouch screen

This topic provides instructions on how to use the multitouch screen.

Tap

Tap gently on the screen with your fingertip to launch an application, select an item, open a menu, or input text using the onscreen keyboard.

Press and hold

Press and hold an object or a blank area on the screen until an action occurs.

Drag

To move an item such as an image and an icon on the screen, tap and hold your finger on the item, move your finger to the desired location, and then take your finger off the screen.

Swipe or slide

Move your finger in a vertical or horizontal direction on the screen to scroll through the Start screen, Web pages, lists, picture thumbnails, and so on.

Zoom

- **Zoom out:** Move two fingers close together on the screen as if you are picking something up to reduce the view of an image or a Web page.
- **Zoom in:** Move two fingers apart on the screen to enlarge the view of an image or a Web page.

Double-tap

For some applications, quickly tap twice on the screen to zoom in. Double-tap again to zoom out.

Rotate the screen

Your tablet has a built-in motion sensor that supports the screen auto-rotation feature. By default, this feature is enabled. When you rotate the tablet, the screen automatically rotates to landscape or portrait view.

To disable the screen auto-rotation feature, press the screen rotation lock button.

Note: Some applications do not support the screen auto-rotation feature.

Using the onscreen keyboard

Use the onscreen keyboard to type text, numbers, symbols, and other characters. When you rotate the tablet, the onscreen keyboard automatically rotates to the corresponding portrait or landscape view.

To open the onscreen keyboard, do the following:

1. Swipe in from the right edge of the screen to display the charms.
2. Tap the **Search** charm.
3. Tap **App**.
4. Tap **On-Screen Keyboard**.

To configure the input language, do the following:

1. Swipe in from the right edge of the screen to display the charms.
2. Tap the **Settings** charm.
3. Tap **App**.
4. Tap **Control Panel**.
5. Tap **Change input methods**. The Language windows opens.
6. Follow the onscreen instructions.

Using the touch keyboard and handwriting panel

Use the touch keyboard and hand writing panel to type text, numbers, symbols, and other characters as well as performing handwriting. When you rotate the tablet, the onscreen keyboard automatically rotates to the corresponding portrait or landscape view.

To open the touch keyboard and handwriting panel, do one of the following:

- On the Start screen, the touch keyboard and handwriting panel is displayed automatically anytime you need to type.
- On the Desktop, tap the keyboard icon to open it.

To configure the input language, do the following:

1. Swipe in from the right edge of the screen to display the charms.
2. Tap the **Settings** charm.
3. Tap **App**.
4. Tap **Control Panel**.
5. Tap **Change input methods**. The Language windows opens.
6. Follow the onscreen instructions.

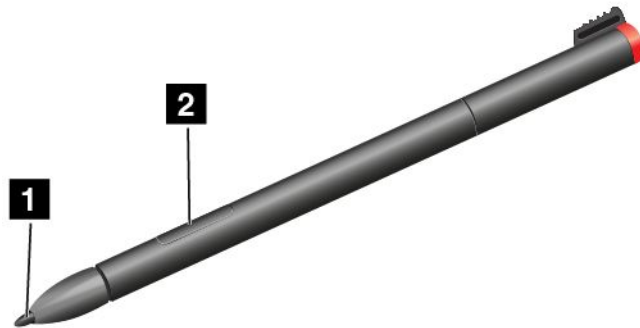
Disabling the onscreen keyboard

If you prefer to use a physical keyboard, connect an external USB keyboard or pair a ThinkPad Tablet 2 Bluetooth Keyboard with Stand to your tablet. The onscreen keyboard is disabled automatically when you type from the physical keyboard.

Using the Tablet Digitizer Pen

The Tablet Digitizer Pen enables you to input text in a natural manner, as well as taking notes, annotating PDF files, and drawing graphics together with applications capable of editing and sketching.

Some tablets are equipped with a Tablet Digitizer Pen as a standard feature.



The Tablet Digitizer Pen consists of a tip **1** and a click button **2**. Hold the pen and point the tip at the display to move the cursor .

To make a selection (single click), tap the display once with the pen. To double-click, tap twice without pausing. To do a right-click, tap the display once and then hold the tip of the pen on the display; the right-click icon appears.

Pressing the click button to take a screen capture and snip the captured image. For more information, see “Using the screen capture function” on page 22.

Checking for installed applications

To check for all of the installed applications, swipe in from the right edge of the screen to display the charms. Then tap **App** without entering a search item.

The following table provides a brief introduction to some Lenovo applications that might be preinstalled on your tablet.

Note: Preinstalled Lenovo applications vary by geographic locations and are subject to change.

Application	Description
Lenovo Cloud solution	Access, view, upload, or download massive resources, software, and information on a remote cloud server in a secured environment.
Lenovo Companion	Get the information about the accessories for your tablet, view blogs and articles about your tablet, and check for recommended programs.
Lenovo Settings	Enhance your experience by turning your tablet into a portable hotspot, sharing your Internet connection using the NFC technology, configuring camera and microphone settings, optimizing your power settings, and creating and managing multiple network profiles.
Lenovo Mobile Access	Sign in with your Microsoft account to register for service, purchase data plans, make payments online, and manage your mobile account.
Lenovo QuickClip	Use the ThinkPad Digitizer Pen to capture the screen and snip the captured image.
Lenovo Support	Register your tablet with Lenovo, check the tablet health condition and battery status, view user manuals for your tablet, get the warranty information for your tablet, and explore help and support information.
Lenovo ThinkVantage Tools	Provide easy access to various Lenovo applications, such as System Update, Password manager, and so on.

Application	Description
ThinkVantage System Update	Keep the software on your tablet up-to-date by downloading and installing software packages (ThinkVantage programs, device drivers, UEFI BIOS updates, and other programs).
Password Manager	Automatically capture and fill in authentication information for Windows applications and Web sites.

Downloading games and applications

To extend the functionality of your tablet, download and install additional applications from the Windows Store and Lenovo App Store. Both Microsoft Store and Lenovo App Store provide an easy and quick way for you to shop for games and mobile applications.

Downloading games and applications from the Windows Store

To download, buy an application, or a game from the Windows Store, do the following:

1. From the Start screen, tap **Store**.
2. Follow the onscreen instructions.

Downloading games and applications from Lenovo App Store

To download or buy an application or a game from Lenovo App Store, do the following:

1. From the Start screen, tap **Lenovo App Store**.
2. Scroll and browse listed applications or games to locate the desired application or game.
3. Tap the application or game, and then follow the instructions on the screen to download and install it.

Chapter 3. Wireless networks and devices

Your tablet can connect to a variety of networks and devices, including mobile networks (3G or 4G), Wi-Fi data networks, and Bluetooth devices.

Note: Some tablet models can connect to both mobile networks (3G or 4G) and Wi-Fi networks, while others can connect to Wi-Fi networks only. If your tablet supports Wi-Fi connection only, the information related to mobile networks does not apply to your tablet.

Installing the SIM card

If your tablet supports the mobile network connection, it might require a SIM card to connect to a mobile network. Depending on the country of delivery, the SIM card might be shipped with your tablet or you need to purchase one from the service carrier.

Attention: When installing or removing the SIM card, do not touch the SIM card metal connectors. As a precaution, always hold your tablet in your hand before you install or remove the SIM card to avoid electrostatic discharges.

To install a SIM card, do the following:

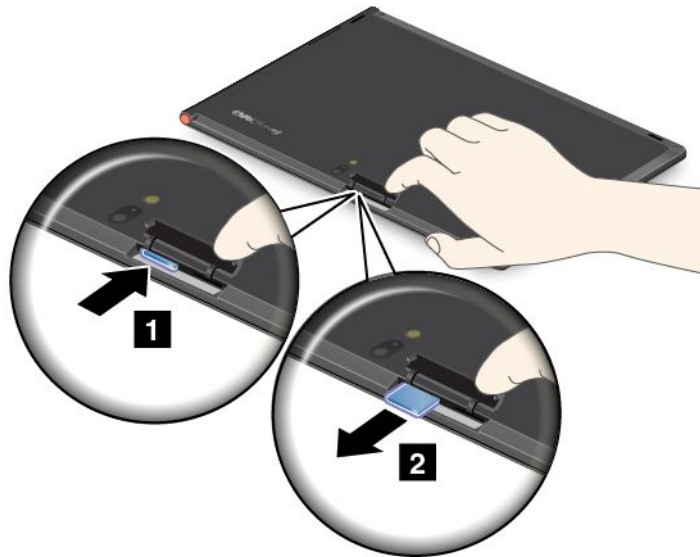
1. Turn off the tablet.
2. Open the SIM card slot cover and locate the SIM card slot. To locate the SIM card slot, see “Tablet layout” on page 1 .
3. Hold the SIM card with the metal contacts facing down, and then insert it firmly into the SIM card slot until you hear a click.



4. Close the SIM card slot cover and restart your tablet.

To remove the SIM card, do the following:

1. Turn off the tablet.
2. Open and hold the SIM card slot cover.
3. Push the SIM card inward until you hear a click **1**. The SIM card ejects. Gently slide the SIM card out of the slot **2**.



4. Close the SIM card slot cover and restart your tablet.

Determining which mobile network you are using

If you have connected to a network, you can check the network name to see which mobile network you are using.

To check the network name, do one of the following:

- Swipe in from the right edge of the screen to display the charms. Then tap the **Settings** charm. The network name is displayed under the network icon.
- On the desktop, move the cursor to the network icon in the Windows notification area. The network name is displayed.

Connecting to a mobile data network

A SIM card is required to connect to a mobile network. Refer to “Installing the SIM card” on page 11 for instructions on how to install a SIM card.

Note: Some tablets support access to Wi-Fi networks only. See “Connecting to a Wi-Fi network” on page 13 for instructions on connecting to a Wi-Fi network.

If you use a mobile data network, you might have to sign up for a data plan with your service carrier in your area. The Lenovo Mobile Access program enables you to sign in with your Microsoft account to register for service, purchase data plans, make payments online, and manage your mobile account.

To use the Lenovo Mobile Access program, do the following:

1. Tap **Lenovo Mobile Access** on the Start screen. The Lenovo Mobile Access program opens.
2. Sign into your account and follow the onscreen instructions.

When you are connected to the mobile data network, set the active mobile network as metered connection to reduce the amount of data you send and receive.

To set the active mobile network as metered connection, do the following:

1. Swipe in from the right edge of the screen to display the charms.
2. Tap the **Settings** charm.

3. Tap the network icon. A list of available Wi-Fi networks is displayed.
4. Tap the Wi-Fi network name and hold your finger on the screen for two seconds. Then take your finger off the screen. A menu is displayed.
5. Tap **Set as metered connection**.

After you set your mobile network as metered connection, you can disable the Download over metered connections feature to prevent extra charges.

To disable the Download over metered connections feature, do the following:

1. Swipe in from the right edge of the screen to display the charms.
2. Tap the **Settings** charm.
3. Tap **Change PC settings**.
4. In the navigation panel, tap **Devices**.
5. In the **Download over metered connections** section, slide to the left to turn it off.

Connecting to a Wi-Fi network

Wi-Fi is a wireless networking technology that provides network access at distances of up to 100 meters (328 feet) depending on the Wi-Fi router and your surroundings. You can connect any ThinkPad Tablet 2 to a Wi-Fi network.

A Wi-Fi connection requires access to a functioning Wireless Access Point (WAP), also called a hotspot. Some hotspots are open to the public, but some others implement security features to limit access to specific groups or individuals.

Note: The range and quality of the Wi-Fi signal is affected by the number of connected devices, the infrastructure, and the objects through which the signal is transmitted.

Connecting to a Wi-Fi network

To establish a Wi-Fi network connection, do the following:

1. Swipe in from the right edge of the screen to display the charms.
2. Tap the **Settings** charm.
3. Tap the network icon. A list of available Wi-Fi networks is displayed.
4. Tap the ID of the network you want to connect.
5. Follow the onscreen instructions to connect to the Wi-Fi network.

To view speed, security, address, and other information about the Wi-Fi network you are connected, tap its ID and hold your finger on the screen for two seconds. Then take your finger off the display. A menu is displayed. Select one of the menu items to view the information you need.

Your tablet supports the proxy feature for Wi-Fi connection. The proxy feature enables you to access more Web-based source and browse Internet more securely. If you want to configure the proxy settings when you are connecting to a Wi-Fi network, do the following:

1. Open the Internet options window. For information about how to open this window, see the Windows Help and Support program.
2. Tap the **Connections** tab.
3. Configure the proxy settings.

For more information about proxy settings, consult your IT administrators.

Adding a Wi-Fi network

If you want to access a Wi-Fi network that does not broadcast its network name (also called a service set identifier or SSID), you must add that Wi-Fi network before you can connect to it.

To add a Wi-Fi network, do the following:

1. Swipe in from the right edge of the screen to display the charms.
2. Tap the **Settings** charm.
3. Tap the network icon. A list of available Wi-Fi networks is displayed.
4. Tap **Hidden network**.
5. Follow the onscreen instructions to add a Wi-Fi network.

Adding a network profile

Each location profile stores all the network and Internet configuration settings needed for connecting to a network infrastructure from a specific location such as a home or an office. By switching between location profiles as you move your tablet from place to place, you can quickly and easily connect to a network with no need to reconfigure your settings manually and restart the tablet each time.

To add a network profile, do the following:

1. From the Start menu, tap **Lenovo Settings**.
2. Tap **Location Awareness**.
3. Follow the onscreen instructions to add a network profile.

Using Bluetooth devices

Bluetooth is a short-range wireless communications technology. Use Bluetooth to establish a wireless connection with another Bluetooth-enabled device over a distance of about 10 m (32.8 ft), such as a ThinkPad Tablet 2 Bluetooth Keyboard with Stand or headset.

Pairing with a Bluetooth device


To connect and exchange data with another Bluetooth device, pair your tablet with the Bluetooth device by doing the following:

1. Swipe in from the right edge of the screen to display the charms.
2. Tap the **Settings** charm.
3. Tap **Change PC settings**.
4. In the navigation panel, tap **Devices**.
5. Tap **Add a device**.
6. When the list of devices is displayed, tap the Bluetooth device you want to pair and follow the instructions on both devices to pair them. If the Bluetooth device is not displayed in the list, tap **Not finding what you are looking for?** and follow the instructions.

Unpairing a Bluetooth device

To unpair a Bluetooth device, do the following:

1. Swipe in from the right edge of the screen to display the charms.
2. Tap the **Settings** charm.
3. Tap **Change PC settings**.
4. In the navigation panel, tap **Devices**.
5. Tap the Bluetooth device you want to unpair.

6. Tap the remove icon  that is displayed to the right.
7. Tap **Remove**.

Chapter 4. Battery and ac power

This chapter provides instructions on how to charge the battery, how to extend the battery life between charges, and how to view the battery status.

Charging the battery

Your tablet is shipped with an ac adapter to charge your tablet from any standard ac power outlet.

Note: The battery is not fully charged when shipped.

To charge the battery, do the following:

1. Plug the ac adapter into a standard ac power outlet.
2. Connect one end of the USB cable to the ac adapter and the other end to the dc-in connector on the tablet.



Figure 4. Connecting the ac adapter with the tablet

3. Disconnect the ac adapter from your tablet when the battery power is full, or leave the ac adapter connected to operate from ac power.

Alternatively, you can use any of the following charging methods to safely recharge the internal battery of your tablet:

Charging method	Tablet on (Display is on)	Tablet off or in screen lock mode (Display is off)
ThinkPad Tablet 2 Dock (fastest charging method)	Approved	Approved
ThinkPad Tablet AC Adapter	Approved, but the battery will charge slowly	Approved
ThinkPad Tablet DC Adapter	Approved, but the battery will charge slowly	Approved
A USB connection between the dc-in connector on the tablet and a USB connector of a personal computer or other device that complies with the USB 2.0 standards (slowest charging method)	This charging method will compensate the power consumption. The battery will discharge more slowly than usual.	Approved, but the battery will charge slowly

Attention: Use only Lenovo approved adapters. Unauthorized adapters could cause severe damage to your tablet.

Extending the battery life between charges

When you are traveling outdoors with your tablet and ac power is not available, you can extend the battery life by doing the following:

- Turn off Wi-Fi, mobile data network, GPS, or Bluetooth when not in use.

To turn off the Wi-Fi, mobile data network, GPS, or Bluetooth feature, do the following:

1. Swipe in from the right edge of the screen to display the charms.
2. Tap **Settings**.
3. Tap **Change PC settings**.
4. In the navigation panel, tap **Wireless**.
5. In the **Wireless devices** section, slide to the left to turn off the wireless devices of your choice.

- Turn off Wi-Fi, GPS, and Bluetooth when not in use.

To turn off the Wi-Fi, GPS, and Bluetooth feature, do the following:

1. Swipe in from the right edge of the screen to display the charms.
2. Tap the **Settings** charm.
3. Tap the network icon.
4. Slide to the right to turn on **Airplane mode** to disable all wireless devices.

- Turn off automatic synchronization for applications if you do not need them.

To turn off the automatic synchronization function, do the following:

1. Swipe in from the right edge of the screen to display the charms.
2. Tap the **Settings** charm.
3. Tap **Change PC settings**.
4. In the navigation panel, tap **Sync your settings**.
5. Switch off **Sync your settings**.

- Adjust the brightness of your screen.

To adjust the brightness of your screen, do the following:

1. Swipe in from the right edge of the screen to display the charms.
2. Tap the **Settings** charm.
3. Tap **Brightness**.
4. Slide down to lower the brightness or slide up to increase the brightness.

- Enter sleep mode when the tablet is temporarily not in use.

To enter sleep mode, do the following:

1. Swipe in from the right edge of the screen to display the charms.
2. Tap the **Settings** charm.
3. Tap **Power → Sleep**.

- Turn off your tablet if you are not going to use it for a while.

To turn off your tablet, do the following:

1. Swipe in from the right edge of the screen to display the charms.

2. Tap the **Settings** charm.
3. Tap **Power → Shut down**.

Checking the battery status

Get the approximate status of your battery at any time by checking the Desktop battery status icon on the taskbar.

To check for the accurate status and adjust your tablet power settings to achieve the best balance between performance and power saving, do the following:

1. From the Start screen, tap **Lenovo Settings → Power**.
2. Check your battery status and configure settings.

To check the battery status in Lenovo Support, do the following:

1. From the Start screen, tap **Lenovo Support → Battery Health**.
2. Check your battery status and configure settings.

Chapter 5. Using your tablet

This chapter provides instructions on how to use some basic applications and many of your tablet's features.

Browsing the Internet

Use the browser to surf the Internet and search for information on the Web.

Note: If you choose to use a mobile data network, you might have to sign up for a data plan with your service carrier in your area. With some carriers, you can choose a data plan, track your data usage, and change or cancel your plan. With some plans you pay based on the amount of data used, while with other plans you pay a fixed fee for unlimited data use.

Some Web sites require you to enter a user name and password before you can gain access. The Password Manager program prompts you to store your logon information when you access a Web site. After the Password Manager program stores your logon information, it automatically logs you on the next time you access the Web site or application. For more information about the Password Manager program, see the help information system that comes with the program.

Using your tablet for entertainment

Use your tablet to take pictures and videos, listen to music, watch movies, and read books.

Using headphones or earphones

Your tablet has a headphone connector that you can use for a variety of listening devices such as headphones, earphones, and ear buds. Listening with the volume turned up too high for too long can lead to hearing loss. The symptoms of hearing damage might be progressive and not noticed at first.

Take the following precautions:

1. Limit the amount of time you use headphones, earphones, ear buds, or other devices that provide sound directly into your ears.
2. Avoid using high volume to block surrounding noise.
3. Decrease the volume if you are unable to hear people speaking around you.
4. To ensure that sound pressure levels do not exceed a safe level, use headphones, earphones, or ear buds that comply with EN 50332-2 (Clause 7 Limits).

Using the cameras

Your tablet has two cameras, a front-facing camera and a rear-facing camera. Each camera has an auto-focus feature that enables you to capture high-quality pictures and videos. The rear-facing camera comes with an integrated flash and includes a panorama mode that enables you to take a single image encompassing a wide range scene.

To launch a camera and configure the camera settings, do the following:

1. From the Start screen, tap **Lenovo Settings** → **Camera**.
2. Follow the onscreen instructions to configure settings and use the camera.

To switch between the front-facing camera and the rear-facing camera, do the following:

1. From the Start screen, tap **Lenovo Settings** → **Camera**.

2. In the **View** section, select **Front Panel** or **Back Panel** from the **Select view** drop-down list box to switch the cameras.

You also can use the camera with other applications that provide features such as photographing, video capturing, and video conferencing. To download other applications, tap **Lenovo App Store** or **Windows Store** from the Start screen. Then follow the onscreen instructions.

Viewing pictures and watching videos

To view your photos, tap **Photos** from the Start screen. **Photos** stores all your pictures that you have taken with your camera, as well as the ones you downloaded or copied from other sources.

To view your videos, tap **Video** from the Start screen. **Video** stores all your videos that you have taken with your camera, as well as the ones you downloaded or copied from other sources. It also provides videos that you might be interested in.

Listening to music

Your tablet is preinstalled with several online music applications. These applications enable you to listen to, download, or purchase music from the Web.

To listen to music stored on your tablet, do either of the following:

- Tap **Music** from the Start screen.
- Launch a preferred music application.

Reading books

To read online books and magazines, tap the application tile to open either the preinstalled e-book reader, or other e-book readers that you have downloaded from the Windows store.

If you want to read documents that are stored on your tablet, use the preinstalled Microsoft Office 2010 or Adobe Reader.

Working with Email

Use the Email application to read and send e-mails and manage all your e-mail accounts.

Using the screen capture function

The screen capture function makes it easy for you to save useful onscreen information and share images of what you see on the screen by taking screen captures.

You can use either the Windows Snipping Tool or Lenovo QuickClip to capture the onscreen information.

- To open and use the Windows Snipping Tool, see the Windows Help and Support program.
- To take a screen capture and snip the captured image using Lenovo QuickClip, do the following:
 1. Hold the Digitizer pen close to the screen. When the pen tip and the screen are within range, press the click button on the pen. The screen is captured, and the **Screen copied** menu is displayed in the upper right corner of the screen.
 2. Tap **Screen copied**. A window opens, prompting you to snip the captured image.
 3. Tap **Start snipping**.
 4. Swipe in from the bottom edge of the screen to bring up the menu that contains further options.
 5. Tap **Rectangle Snip** or **Free Snip** as desired.

6. Snip the image. The image is saved automatically.
7. Tap **Home** to view the snipped image.

Working with USB devices

Your tablet has a dc-in connector and a USB connector to connect USB compatible devices. Read this topic to learn how to use each connector to connect different devices.

Using the dc-in connector

Use the dc-in connector together with the supplied USB cable to connect your tablet to the AC adapter to charge the tablet battery.

Note: The dc-in connector is for dc charge only.

Using the USB connector

Use the USB connector to connect a compatible USB device, such as a USB mouse, USB keyboard, or USB memory key. To locate the USB connector on your tablet, see “Tablet layout” on page 1 .

Notes:

- The USB connector is compatible with the USB 2.0 standard.
- The USB connector can provide a maximum of 2.5 W power output.

Working with a USB keyboard or USB mouse

If you are accustomed to using a traditional physical keyboard, you can connect a USB keyboard to your tablet.

Keyboards can also be set up through the ThinkPad Tablet 2 Dock’s USB connector and Lenovo offers both a ThinkPad USB Keyboard with TrackPoint® and a ThinkPad Edge wireless keyboard and mouse combo that can connect through this port. To purchase these options, go to <http://www.lenovo.com/accessories/services/index.html>.

For information about using a ThinkPad Tablet 2 Bluetooth Keyboard with Stand, see “Using the Bluetooth keyboard” on page 29.

You also can connect a USB mouse to the tablet. As soon as you connect a USB mouse to the tablet, a pointer is displayed on the tablet screen indicating that the mouse is activated and ready for use.

Using the micro SD card reader

Your tablet has a micro SD card reader.

To locate the micro SD card reader, see “Tablet layout” on page 1 .

Inserting a micro SD card

Attention: Before handling a micro SD card, touch a metal table or a grounded metal object. This action reduces any static electricity from your body. Static electricity can damage the card.

To insert a micro SD card into the micro SD card reader, do the following:

1. Open the card reader cover and locate the micro SD card reader.
2. Make sure that the metal contacts of the card are facing down and pointing toward the tablet.

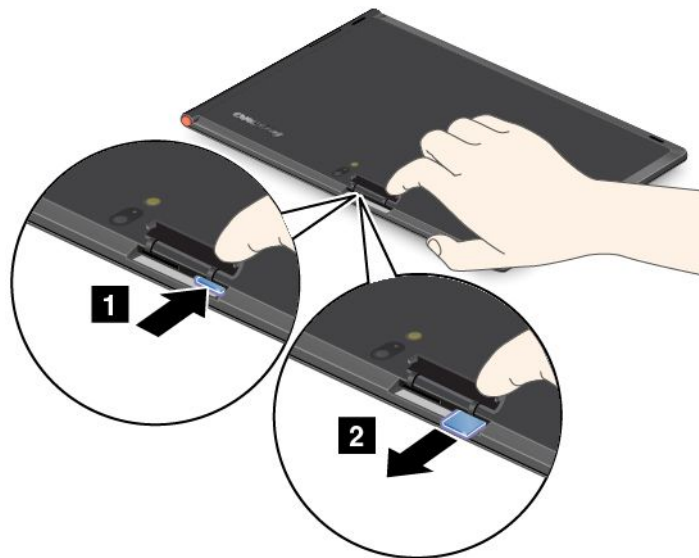
3. Insert the card firmly into the micro SD card reader until you hear a click. The card might stop before it is completely installed into the card reader.



Removing a flash media card

To remove a flash media card, do the following:

1. Open the slot cover.
2. Push the micro SD card inward a little until you hear a click; then, release it. The micro SD card pops out.
3. Gently slide the card out of the card reader.



Using HDMI devices

Your tablet has a mini HDMI connector that you can use to connect an external display for video output. To locate the mini HDMI connector, see “Tablet layout” on page 1 .

To configure screen settings for the external display, do the following:

1. Swipe in from the right edge of the screen to display charms.

2. Tap the **Devices** charm.
3. Tap **Second screen**.
4. Tap to select a presentation scheme.

Using synchronization solutions

By using synchronization solutions, you can easily synchronize settings between your tablet and personal computer.

Synchronizing settings by using the Windows synchronization solution

To access Windows synchronization solution, do the following:

1. Swipe in from the right edge of the screen to display the charms.
2. Tap the **Settings** charm.
3. Tap the **Change PC settings**.
4. In the navigation panel, tap **Sync your settings**.
5. Configure settings as desired.

Synchronizing files by using the Lenovo Cloud solution

The Lenovo Cloud solution enables you to access, view, upload, or download massive resources, software, and information on a remote cloud server in a secured environment.

For more information about the Lenovo Cloud solution, go to <http://www.lenovo.com/cloud>.

Sharing your Internet connection

You can share your tablet's mobile data connection with a single computer through Wi-Fi tethering. You also can share your Internet connection with multiple devices at the same time by setting your tablet as a mobile hotspot.

Sharing your Internet connection by turning your tablet into a mobile hotspot

To share your Internet connection by turning your tablet into a mobile hotspot, do the following:

1. From the Start screen, tap **Lenovo Settings → Mobile Hotspot**.
2. In the **Set up hotspot** section, choose the network to share, create a name and a password for your mobile hotspot, and then select a security option.
3. Tap **Start Sharing** to turn your tablet into a mobile hotspot. Then other users can connect to your network by entering the correct mobile hotspot name and password.
4. In the **Manage Users** section, you can view users who are connected to your network in the drop-down list box.

Sharing your Internet connection using NFC

NFC is a wireless technology that enables you to establish radio communication between two devices by touching them together or bringing them into close proximity, usually no more than a few centimeters.

If your tablet is NFC-enabled, to invite and connect another NFC-enabled device to your hotspot, do the following:

1. From the Start screen, tap **Lenovo Settings → Mobile Hotspot**.
2. In the **Enable NFC** section, slide to the right to enable NFC.

3. Turn your tablet into a mobile hotspot. For more information, see “Sharing your Internet connection by turning your tablet into a mobile hotspot” on page 25.
4. Bring the two devices into very close proximity or touch them together.
5. If you want to direct the invited user to a Web site address when the user is connected to your hotspot, locate the **Tap to Share** section, select the check box next to the Web site address field, and fill in a Web site address into the field.

Note: The invited user will be directed to the defined Web site address when the user is connected to your hotspot.

6. In the **Tap to Share** section, tap the invitation message to send an invitation notification to the user you want to invite.

Note: The invited user must tap the invitation notification prompt within one minute to connect to your hotspot. Otherwise, you have to tap the invitation message to send the invitation notification again.

Using the GPS satellite receiver

Your tablet has a global positioning system (GPS) satellite receiver that enables you to pinpoint your location down to the street level. Use location-based applications such as Google Maps to find your current location, get directions to your destination, and find other location-based information.

Note: For longer battery life, disable the GPS satellite receiver when not in use.

Chapter 6. ThinkPad Tablet 2 options

Your tablet might come with a ThinkPad Tablet 2 Dock or a ThinkPad Tablet 2 Bluetooth Keyboard with Stand. If your tablet does not come with one, you can purchase one from Lenovo at <http://www.lenovo.com/accessories/services/index.html>.

The ThinkPad Tablet 2 Dock and the ThinkPad Tablet 2 Bluetooth Keyboard with Stand are option devices that Lenovo designed specifically for the ThinkPad Tablet. These options provide convenience and make your tablet easier to use for work, study, and entertainment.

ThinkPad Tablet 2 Bluetooth Keyboard with Stand

This topic gives an introduction to the ThinkPad Tablet 2 Bluetooth Keyboard with Stand (hereafter called Bluetooth keyboard).



Figure 5. Bluetooth keyboard overview

1 Bluetooth keyboard

Works as a Bluetooth keyboard with optical TrackPoint and hot keys.

2 3 Optical TrackPoint

The optical TrackPoint is a cursor-positioning device that enables you to point, select, drag and scroll without moving your fingers from a typing position.

For more information, see “Using the Bluetooth keyboard” on page 29.

4 Hot keys

The hot keys enable you to control many features of your tablet by pressing a single key. Refer to “Using the Bluetooth keyboard” on page 29 for more information.

5 Stand

The stand holds your tablet in an upright position.

ThinkPad Tablet 2 Dock

The ThinkPad Tablet 2 Dock (hereafter called the dock) holds your tablet in an upright position and frees your hands to do other tasks. It also provides you with easy access to connectors for USB devices, file transfers, charging, audio input, audio output, and video output.



Figure 6. Dock front view and right side view

1 Dock connector

This connector establishes the connection between the dock and tablet when your tablet is seated in the dock.

2 USB connector

Connect USB devices, such as a USB keyboard or a USB storage device.

Note: This connector is compatible with the USB 2.0 standard.

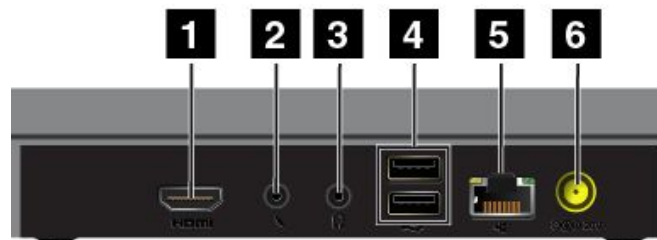


Figure 7. Dock rear view

1 HDMI connector

Connect a compatible digital audio device or video display.

2 Headphone connector

Connect a headphone or powered speakers to listen to the audio output.

3 Microphone connector

Connect a microphone to capture sound.

4 USB connectors

Connect compatible USB devices.

5 Ethernet connector

Connect your tablet to a LAN (10/100Mbps).

6 Power connector

Use the 65 W ac power adapter shipped with the dock to provide power to the tablet and charge the battery.

Using the Bluetooth keyboard

To use the Bluetooth keyboard, install your tablet into the keyboard first, as shown in the following illustration. Ensure that the tablet is secured in place.



Figure 8. Installing the tablet into the Bluetooth keyboard




Then, pair the Bluetooth keyboard with your tablet. See “Using Bluetooth devices” on page 14.

Note: To save battery power, turn off the Bluetooth keyboard when it is not in use. For information about how to turn off the Bluetooth feature, see “Extending the battery life between charges” on page 18.




Using the hot keys

The Bluetooth keyboard has several hot keys. Press a hot key to quickly control the associated function. To locate the hot keys, see “ThinkPad Tablet 2 Bluetooth Keyboard with Stand” on page 27.

Volume and mute control

-  F1 Speaker mute
-  F2 Speaker volume down
-  F3 Speaker volume up
-  F4 Microphone mute

Application control


-  F7 Open the **Settings** charm
-  F8 Open the **Search** charm
-  F10 View all applications

-  View all applications that you have opened

Screen control

-  Brightness down
-  Brightness up

Fn key control

-  Toggle the F1-F12 key functionality to use the keys in default mode or in legacy mode. In default mode, you can initiate the special functions illustrated on each key by tapping the corresponding key directly. In legacy mode, to initiate the special functions illustrated on each key, tap and hold the Fn key and then tap the desired function key, then release both keys.

Using the optical TrackPoint



Figure 9. Using the optical TrackPoint

The optical TrackPoint consists of a pointing sensor **1**, two click buttons **2 4**, and a center button **3**. To move the pointer **5** on the screen, slide your finger tip across the top of the pointing sensor **1** in the direction in which you want the pointer to move. To select an item or open an application, put the pointer **5** on the desired item and press the left button **4**. To open the menu for the current application, press the right button **2**. To scroll Web pages or documents in any direction, press the center button **3** and slide your finger tip across the top of the pointing sensor.

For more information about the Bluetooth keyboard, refer to the documentation shipped with the Bluetooth keyboard.

Using the ThinkPad Tablet 2 Dock

This topic provides instructions on how to use the dock.

To connect your tablet to the dock, do the following:

1. Position your tablet with the dock connector side facing downward.

2. Align the dock connector on the tablet with the connector on the dock.
3. Gently slide your tablet into the dock until it is seated in place.



Figure 10. Sitting your tablet on the dock

After the tablet is connected to the dock, you can:

- Use your tablet in an upright position without having to hold the tablet.
- Use the dock to hold your tablet upright when using an external USB keyboard.
- Connect the dock to your personal computer with the supplied USB cable to transfer files.
- Connect the dock to a stereo system or speakers using a stereo audio cable to play music.
- Connect the dock to an electrical outlet using the 65 W ac power adapter shipped with the dock to charge the tablet battery.

Chapter 7. Security

This chapter provides information about how to protect the information stored on your tablet.

Using passwords

By using passwords, you can help prevent your tablet from being used by others. Once you set a password, a prompt is displayed on the screen each time you turn on the tablet. Enter your password at the prompt. You cannot use the tablet unless you type the correct password.

Passwords and sleep mode

If you have set a Windows password and you put your tablet into sleep mode, you will be prompted to enter the password when resuming operation.

If you use your email address as a user account to sign in to Windows, enter your email password when resuming operation.

Supervisor password

If you have set a supervisor password in the ThinkPad Setup program, you are prompted to enter a supervisor password when you start the ThinkPad Setup program.

The supervisor password protects the system information stored in the ThinkPad Setup program. Without it, no one can change the configuration of the tablet.

Note: The system administrator can set the same supervisor password on many ThinkPad notebook tablets to make administration easier.

Setting, changing, or removing a supervisor password

Only a system administrator can set, change, or remove a supervisor password.

To set, change, or remove a supervisor password, do the following:

1. Print these instructions.
2. Save all open files, and exit all applications.
3. Turn your tablet off and then turn it on again.
4. When the logo screen is displayed, press the power button and the volume up button together. The ThinkPad Setup program main menu opens.
5. Tap **Security**.
6. Tap **Password**.
7. Tap **Supervisor Password**.
8. A window opens, prompting you to enter a new password. Depending on your needs, do one of the following:
 - To set a password, do the following:
 - a. Choose your supervisor password and type it in the **Enter New Password** field.
 - b. Tap the next line. Retype the password you just entered to verify it.
 - To change a password, do the following:
 - a. In the **Enter Current Password** field, type the current supervisor password.

- b. In the **Enter New Password** field, type the new supervisor password; then retype the password you just entered to verify it in the **Confirm New Password** field.
 - To remove a password, do the following:
 - a. In the **Enter Current Password** field, type the current supervisor password.
 - b. Leave the **Enter New Password** and **Confirm New Password** fields blank.
9. Commit your password to memory. A Setup Notice window is displayed.

Attention: You might want to note down your password and keep it in a safe place. If you forget your supervisor password, Lenovo cannot reset your password. You must take your tablet to a Lenovo reseller or a Lenovo marketing representative to have the system board replaced. Proof of purchase is required, and a fee will be charged for parts and service.

10. Tap **Exit** to exit from the Setup Notice window.

The next time you open the ThinkPad Setup program, you will be prompted to type your password to proceed.

Setting the security chip

Strict security requirements are imposed on network client tablets that transfer confidential information electronically. Depending on the options you ordered, your tablet might have an embedded security chip, a cryptographic microprocessor.

Setting the security chip

The choices offered on the **Security Chip** submenu under the **Security** menu of the ThinkPad Setup program are the following:

- **Security Chip Selection:** select the security chip you want to use.
- **Security Chip:** activate, inactivate, or disable the security chip.
- **Security Reporting Options:** enable or disable each security reporting option.
- **Clear Security Chip:** clear the encryption key.
- **Physical Presence for Provisioning :** enables or disables the confirmation message when you change the settings of the security chip.
- **Physical Presence for Clear:** enables or disables the confirmation message when you clear the security chip.

Notes:

1. Be sure that the supervisor password has been set in the ThinkPad Setup program. Otherwise anyone can change the settings for the security chip.
2. If the security chip is removed or replaced, or a new one has been added, the tablet will not start. You will hear four cycles of four beeps each.
3. If the security chip is inactive or disabled, the **Clear Security Chip** option will not be displayed.
4. When you clear the security chip, be sure to turn your tablet off and then turn it on again after you set the security chip to **Active**. Otherwise, the **Clear Security Chip** option is not displayed.

To set an item on the **Security Chip** submenu, do the following:

1. Print these instructions.
2. Save all open files, and exit all applications.
3. Turn your tablet off and then turn it on again.
4. When the logo screen is displayed, press power button together with the volume up button. The ThinkPad Setup program main menu opens.

5. Tap **Security**. The **Security** menu opens.
6. Tap **Security Chip**. The **Security Chip** submenu opens.
7. Tap an item you want to set. When the item is highlighted, tap the item.
8. Set other items that you want to set.
9. Tap **Exit**.

Using firewalls

If your system is preinstalled with a firewall program, it protects against tablet Internet security threats, unauthorized access, intrusions, and Internet attacks. It also protects your privacy.

For more information about how to use the firewall program, refer to the online help that comes with the program.

Protecting data against viruses

Your tablet is preinstalled with an antivirus program so you can detect and eliminate viruses. The antivirus program is designed to help you detect and eliminate viruses.

Lenovo provides a full version of antivirus software on your tablet with a free 30-day subscription. After 30 days, you must renew the license to continue receiving the antivirus software updates.

For more information about how to use your antivirus software, refer to the help system of your antivirus software.

Chapter 8. Recovery overview

This section provides information about the recovery solutions.

Refreshing your tablet

If your tablet does not perform well and the problem might be caused by a recently installed program, you can refresh your tablet without losing your personal files or changing your settings.

Attention: If you refresh your tablet, the programs that came with your tablet and the programs that you installed from Windows Store will be reinstalled, but all other programs will be removed.

To refresh your tablet, do the following:

1. Swipe in from the right edge of the screen to display the charms.
 2. Tap the **Settings** charm.
 3. Tap **Change PC settings**.
 4. Tap **General**.
 5. In the **Refresh your PC without affecting your files** section, click **Get started**.
-

Restoring your tablet to the factory default state

You can restore your tablet to the factory default state. Restore the tablet reinstalls the operating system, programs, and settings that came with your tablet.

Attention: When you restore your tablet, all your personal files and settings are deleted. To avoid data loss, make a backup copy of all the data that you want to keep before you restore your tablet.

To reset your tablet, do one the following:

- **Using a USB recovery key provided by Lenovo (32 GB models only):**
 1. When you turn on the tablet, press the power button together with the volume up button at the same time to enter the ThinkPad Setup program.
 2. On the **Boot** submenu, select **USB Drive**, and then tap “+/-” until the **USB Drive** is shown as the first startup device.
 3. Insert the USB recovery key into the USB connector of your tablet.
 4. Tap F10 to save the configuration change and exit ThinkPad Setup. The tablet restarts and the recovery program opens.
 5. Depending on your needs, select the language you prefer in the drop-down list box. Click **Next**.
 6. Follow the onscreen instructions.
- **Using the recovery application provided by Microsoft (all models except 32 GB models):**
 1. Swipe in from the right edge of the screen to display the charms.
 2. Tap **Settings**.
 3. Tap **Change PC settings**.
 4. Tap **General**.
 5. In the **Remove everything and reinstall Windows** section, tap **Get started**.

For more information, see the Windows Help and Support program.

Advanced startup options

Advanced startup options enable you to change the startup settings of your Windows operating system, start the tablet from an external device, or restore the Windows operating system from a system image.

To use the advanced startup options, do the following:

1. Swipe in from the right edge of the screen to display the charms.
2. Tap the **Settings** charm.
3. Tap **Change PC settings**.
4. Tap **General**.
5. In the Advanced startup section, tap **Restart now → Troubleshoot → Advanced options**.
6. Restart your tablet following the instructions on the screen.

For more details about the recovery solutions provided on tablets preinstalled with the Windows 8 operating system, refer to the help information system of the Windows 8 operating system.

Chapter 9. Advanced configuration

If you need to update your system UEFI BIOS, install new device drivers, this information will help you handle your tablet with proper care and keep it in top working shape.

- “Installing device drivers” on page 39
- “ThinkPad Setup” on page 39
- “Using system management” on page 43

Installing device drivers

The device drivers are available at <http://www.lenovo.com/ThinkPadDrivers>. Click your tablet product name to view all the device drivers for your tablet.

Attention: Always go to <http://www.lenovo.com/ThinkPadDrivers> for the latest device drivers. Do not download them from the Windows Update Web site.

ThinkPad Setup

Your tablet comes with the ThinkPad Setup program to enable you to select various setup parameters.

To start the ThinkPad Setup program, do the following:

1. Turn on the tablet. When the logo screen is displayed, press the power button together with the volume up button at the same time. The ThinkPad Setup program main menu opens.

Note: If you have set a supervisor password, the ThinkPad Setup program main menu will be displayed after you enter the password. You can start the ThinkPad Setup program by tapping Enter instead of entering the supervisor password on the onscreen keyboard. However, you cannot change the parameters that are protected by the supervisor password.

2. Tap the item you want to change. When the item is highlighted, tap the item. A submenu is displayed.
3. Tap **Esc** to exit from the submenu.
4. If you are on a nested submenu, tap **Esc** repeatedly until you reach the ThinkPad Setup program main menu.

Note: If you need to restore the settings to their original state as of the time of purchase, tap **Default** to load the default settings. You also can tap an option on the Restart submenu to load the default settings or discard the changes.

5. Tap **Restart**. Tap the option you want for restarting your tablet, then tap **Enter**. Your tablet restarts.

Main menu

The **Main** menu is the first interface you see after you enter the ThinkPad Setup program. It displays the following configuration of your tablet:

- **UEFI BIOS Version**
- **UEFI BIOS Date (Year-Month-Day)**
- **Machine Type Model**
- **System-unit serial number**
- **System board serial number**
- **Asset Tag**

- CPU Type
- CPU Speed
- Installed memory
- UUID
- Preinstalled OS License
- UEFI Secure Boot

Date and Time menu

If you need to set the current date and time of your tablet, tap **Date/Time** from the ThinkPad Setup menu. The following submenu is displayed:

- System Date
- System Time

To change the date and time, do the following:

1. Tap to select the item to change the date or time.
2. Tap to select a field.
3. Input the date or time.

Security menu

If you need to set the security features of your tablet, tap **Security** from the ThinkPad Setup menu.

The following table lists the **Security** menu items.

Notes:

- Default values are in **boldface**. The default settings are already optimized for you. If you consider changing the tablet configuration, proceed with extreme caution. Setting the configuration incorrectly might cause unexpected results.
- In each submenu, tap the default value to show selectable options and tap a desired option.
- Some items are displayed on the menu only if the tablet supports the corresponding features.

Table 1. Security menu items

Menu item	Submenu item	Value	Comments
Password	Supervisor Password	<ul style="list-style-type: none"> • Disabled • Enabled 	See “Supervisor password” on page 33.
Security Chip	Security Chip Selection	<ul style="list-style-type: none"> • TPM2.0 • Discrete TPM • Disable 	Select TPM2.0 to use the TPM 2.0 security chip. Select Discrete TPM to use the discrete TPM 1.2 security chip. Select Disable to disable the TPM 2.0 and TPM 1.2 security chips.
	Security Chip	<ul style="list-style-type: none"> • Active • Inactive • Disabled 	If you select Active , the security chip is functional. If you select Inactive , the Security Chip option is visible, but the security chip is not functional. If you select Disabled , the Security Chip option is hidden and the security chip is not functional.
	Security Reporting Options	<ul style="list-style-type: none"> • Disabled • Enabled 	Enable or disable the following Security Reporting Options: <ul style="list-style-type: none"> • BIOS ROM String Reporting: BIOS text string • CMOS Reporting: CMOS data

Table 1. Security menu items (continued)

Menu item	Submenu item	Value	Comments
			<ul style="list-style-type: none"> • NVRAM Reporting: Security data stored in the Asset ID • SMBIOS Reporting: SMBIOS data
	Clear Security Chip	<ul style="list-style-type: none"> • Enter 	<p>Clear the encryption key.</p> <p>Note: This item is displayed only if you have selected Active for the Security Chip option.</p>
	Physical Presence for Provisioning	<ul style="list-style-type: none"> • Disabled • Enabled 	This option enables or disables the confirmation message when you change the settings of the security chip.
	Physical Presence for Clear	<ul style="list-style-type: none"> • Disabled • Enabled 	This option enables or disables the confirmation message when you clear the security chip.
UEFI BIOS Update Option	Flash BIOS Updating by End-Users	<ul style="list-style-type: none"> • Disabled • Enabled 	If you select Enabled , all users can update the UEFI BIOS. If you select Disabled , only the person who knows the supervisor password can update the UEFI BIOS.
	Secure RollBack Prevention	<ul style="list-style-type: none"> • Disabled • Enabled 	If you select Disabled , you can flash to the previous version of UEFI BIOS. If you select Enabled , you can not flash to the previous version of UEFI BIOS.
I/O Port Access	Wireless LAN	<ul style="list-style-type: none"> • Disabled • Enabled 	If you select Enabled , you can use the Wireless LAN device.
	Wireless WAN	<ul style="list-style-type: none"> • Disabled • Enabled 	If you select Enabled , you can use the Wireless WAN device.
	Bluetooth	<ul style="list-style-type: none"> • Disabled • Enabled 	If you select Enabled , you can use Bluetooth devices.
	USB Port	<ul style="list-style-type: none"> • Disabled • Enabled 	If you select Enabled , you can use USB connectors.
	Memory Card Slot	<ul style="list-style-type: none"> • Disabled • Enabled 	If you select Enabled , you can use the memory card slots.
	Integrated Camera	<ul style="list-style-type: none"> • Disabled • Enabled 	If you select Enabled , you can use the integrated camera.
	Microphone	<ul style="list-style-type: none"> • Disabled • Enabled 	If you select Enabled , you can use the microphones (internal, external, or line-in).
	NFC	<ul style="list-style-type: none"> • Disabled • Enabled 	If you select Enabled , you can use the NFC.

Table 1. Security menu items (continued)

Menu item	Submenu item	Value	Comments
Secure Boot	Secure Boot	<ul style="list-style-type: none"> • Disabled • Enabled 	Enable or disable UEFI Secure Boot feature. Windows 8 operating system requires this feature to be enabled.
	Platform Mode	<ul style="list-style-type: none"> • User Mode • Setup Mode 	Specify the system operating mode.
	Secure Boot Mode	<ul style="list-style-type: none"> • Standard Mode • Custom Mode 	Indicates Secure Boot mode is standard mode or custom mode.
	Reset to Setup Mode	<ul style="list-style-type: none"> • Enter 	This option is used to clear the current platform key and put the system into setup mode. You can install your own platform key and customize the Secure Boot signature databases in setup mode. Secure Boot mode will be set to custom mode.
	Restore Factory keys	<ul style="list-style-type: none"> • Enter 	This option is used to restore all keys and certificates in Secure Boot databases to factory defaults. Any customized Secure Boot settings will be erased, and the default platform key will be re-established along with the original signature databases including certificate for Windows 8 operating system.

Startup menu

You might need to change the tablet startup settings. To do so, tap **Startup** from the ThinkPad Setup menu.

Attention:

- After you change your startup sequence, you must be extremely careful not to specify a wrong device during a copy, a save, or a format operation. If you specify a wrong device, your data and programs might be erased or overwritten.
- If you are using the BitLocker drive encryption, you should not change the startup sequence. BitLocker drive encryption detects the change of startup sequence and locks the tablet from booting.

Changing the startup sequence

To change the startup sequence, do the following:

1. Tap **Boot**. The default boot list is displayed, showing the order in which devices will be started up, even devices that are not attached to or installed on your tablet are listed.
2. In the **Boot** submenu, tap the menu item to specify the startup sequence that runs when you turn on the power.
3. Tap **Save and Exit** to save the changes and restart the system.

The following table lists the **Startup** menu items.

Notes:

- Default values are in **boldface**.
- In each submenu, tap the default value to show selectable options and select a desired option.
- Some items are displayed on the menu only if the tablet supports the corresponding features.

Table 2. Startup menu items

Menu item	Value	Comments
Boot		See “Changing the startup sequence” on page 42.
Option Key Display	<ul style="list-style-type: none"> • Disabled • Enabled 	If you select Disabled , then the message “To interrupt normal startup, press Enter.” is not displayed during the POST.
Boot Device List F12 Option	<ul style="list-style-type: none"> • Disabled • Enabled 	If you select Enabled , the F12 key is recognized and the Boot Menu is displayed.
Boot Order Lock	<ul style="list-style-type: none"> • Disabled • Enabled 	If you select Enabled , the boot priority order is locked for your future use.

Restart menu

If you need to close the ThinkPad Setup and restart the system, select **Restart** from the ThinkPad Setup menu. The following submenu is displayed:

- **Exit Saving Changes:** Restart the system after saving the changes.
- **Exit Discarding Changes:** Restart the system without saving the changes.
- **Load Setup Defaults:** Load the default setting that was in effect at the time of purchase.
- **Discard Changes:** Discard the changes.
- **Save Changes:** Save the changes.

Updating your system UEFI BIOS

The Unified Extensible Firmware Interface (UEFI) BIOS is a part of the system programs that make up the basic layer of software built into your tablet. The UEFI BIOS translates the instructions from other software layers.

Your tablet system board has a module called EEPROM, also referred to as flash memory. You can update the UEFI BIOS and the ThinkPad Setup program by starting your tablet with a flash update optical disc or flash update application running in the Windows environment.

In some instances when you add software, hardware, or a device driver, you might be informed that you need to update your UEFI BIOS in order for the new addition to work properly.

To update your UEFI BIOS, go to the following Web site and follow the instructions on the screen:
<http://www.lenovo.com/ThinkPadDrivers>

Using system management

This section is intended primarily for network administrators.

Your tablet is designed for manageability, so that you can redirect more of your resources to better meet your business objectives.

This manageability, or “Total Cost of Ownership” (TCO), enables you to remotely operate client tablets in the same way as you operate your own tablet, such as turning on a client tablet, formatting hard disk drive, and installing software.

Once the tablet is configured and operational, you can manage it by use of software and manageability features already integrated into the client system and the network.

System management

Read this topic to learn more about features of system management.

Desktop Management Interface

The system UEFI BIOS of your tablet supports an interface called System Management BIOS Reference Specification (SMBIOS) V2.6.1 SMBIOS provides information about the hardware components of your system. It is the responsibility of the BIOS to supply this database with information about itself and the devices on the system board. This specification documents the standards for getting access to this BIOS information.

Preboot eXecution Environment

Preboot eXecution Environment (PXE) technology makes your tablet more manageable (it is PXE 2.1-compliant) by enabling it to boot (load an operating system or another executable image) from a server. Your tablet supports the personal tablet functions that PXE requires. For example, with the appropriate LAN card, your tablet can be booted from the PXE server.

Note: Remote Program Load (RPL) cannot be used with your tablet.

Asset ID EEPROM

The Asset ID EEPROM contains information about the system, including its configuration and the serial numbers of key components. It also includes a number of blank fields in which you can record information about the end users in your network.

Setting management feature

Your network administrator can remotely update the system programs on your tablet from a management console. The following requirements must be met:

- Your tablet must be started over the LAN.
- Your tablet must be engaged in a Preboot eXecution Environment.
- Network-management software must be installed on the remote administrator's tablet.

Chapter 10. You and your tablet

This chapter provides the accessibility information about your tablet, and instructions on traveling with the tablet and maintaining the tablet.

Comfort and accessibility

Read this topic to learn how to use your tablet more comfortably and how to use the accessibility features.

Using your tablet more comfortably

With the help of all the conveniences and powerful features of your tablet, you can carry your tablet all day long for work or entertainment at many places. Therefore it is important that you remain attentive to good posture, good lighting, and proper seating to achieve greater comfort with your tablet.

Active sitting and rest breaks: The longer you sit and work with your tablet the more important it is to observe your working posture. Make minor voluntary postural changes and take frequent, short breaks when you use the tablet for a long time. Your tablet is a light and mobile system; remember that it can easily be repositioned to accommodate many posture modifications you might wish to make.

Work area setup options: Familiarize yourself with all of your office furniture so that you know how to adjust your work surface, seat, and other work tools to accommodate your preferences for comfort. If your work area is not in an office setting, be sure to take special note of employing active sitting and utilizing work breaks. Note that there are many ThinkPad product solutions available to help you modify and expand your tablet to best suit your needs. Access the Web site <http://www.lenovo.com/accessories/services/index.html> to view some of these options. Explore your options for docking solutions and external products that can provide the adjustability and features that you want.

Accessibility information

Accessibility technologies enable users that have hearing, vision, and mobility limitations to access information in the most appropriate way and get the most out of their tablet experience.

Zoom

Zoom in to enlarge the text size. To zoom in, tap the screen with two fingers and then slide them apart.

To reduce the text size, zoom out by dragging your fingers together.

Screen brightness

To set a screen brightness level that works for you, adjust the screen brightness.

Screen reader applications

Screen reader applications can read out software application interfaces, help systems, and a variety of online documents. If you need this feature, go to Windows Store or Lenovo App Store to download a screen reader application.

Getting updates

Your tablet enables you to update the Windows operating system and Lenovo applications.

Getting updates from Lenovo

Your tablet is preinstalled with System Update. This program enables you to keep the Lenovo software on your tablet up-to-date by downloading and installing software updates.

To start System Update, do the following:

1. Swipe in from the right edge of the screen to display the charms.
2. Tap the **Search** charm.
3. Tap **App**.
4. Tap **System Update**.
5. Follow the onscreen instructions.

Getting updates from Microsoft

To check and keep your Windows, programs, or device drivers up-to-date, see the Windows Help and Support program for more information.

Traveling with your tablet

This topic provides information to help you work with and transport your tablet while you traveling.

Travel tips

Use the following travel tips to travel more confidently and efficiently with your tablet:

1. While it is safe to allow your tablet to go through the x ray machines at airport security stations, it is important to keep your eyes on the tablet at all times to prevent theft.
2. Put your tablet in a protective case when not in use to prevent damage or scratching.

Travel tips on airplanes

If you carry your tablet into an airplane, check the following travel tips:

1. If you are going to use the wireless service, check with the airline for any restrictions before boarding the airplane.
2. If there are restrictions on the use of tablets with the wireless feature on an airplane, enable the Airplane mode. To enable it, do the following:
 - a. Swipe in from the right edge of the screen to display the charms.
 - b. Tap the **Settings** charm.
 - c. Tap the network icon.
 - d. Slide to the right to turn on **Airplane mode**.
3. Be careful about the seat in front of you on the airplane. Place your tablet in a safe position so that it does not get caught when the person in front of you leans back.

Travel accessories

The following is a checklist of things to consider packing when you are going to be away from your office or home:

Travel essentials:

- The ThinkPad Tablet AC Adapter that comes with your tablet
- The supplied USB cable
- A quality carrying case that provides adequate cushion and protection

If you are traveling to another country or region, you might want to consider these items:

- A ThinkPad Tablet AC Adapter for the country to which you are traveling
- A SIM card for the local mobile services in that country or region

Other items you might want to consider:

- ThinkPad headphones
- Additional storage devices or flash media cards
- A ThinkPad Tablet DC Adapter if you are traveling by automobile
- ThinkPad Tablet 2 Bluetooth Keyboard with Stand

Care and maintenance

Handle your tablet with care so that you can enjoy this product for a long time.

Cleaning your tablet

To clean your tablet, unplug all cables and turn off the tablet by pressing and holding the power button for a few seconds. Then wipe the tablet screen with a soft, lint-free, dry cloth to clear stains and smudges.

Note: Do not use screen cleaners, household cleaners, aerosol sprays, solvents, alcohol, ammonia, or abrasives to clean your tablet.

Protecting the screen with a replaceable film

You can purchase a replaceable film to protect the screen from scratching and extend the life of your tablet. To use a replaceable film, clean the screen first and then apply the replaceable film on the screen.

Storing the tablet for extended periods

If you are not going to use your tablet for an extended period of time, remove the SIM card and the flash media card from your tablet, and then pack your tablet with a protective case and store it in a well-ventilated and dry area without direct exposure to sunshine.

Chapter 11. Troubleshooting problems

This chapter describes on what to do if you experience a problem with your tablet.

Troubleshooting

The problems and solutions described in this chapter are meant only as a guide. They are not definitive problem solving techniques. For some problems, you might need help from Lenovo, your reseller, or your service provider.

When you observe a problem, stop operation immediately, because taking further action might result in data loss or damage. Take a note of what the system is doing and what actions you performed before the problem occurred. Provide detailed information to Lenovo or your service provider for quicker problem resolution.

Internet problem

Problem: Unable to connect to the wireless network.

Suggested solution: Ensure that:

- The SIM card is valid and workable if you are using a mobile data network (3G or 4G).
- You are within the network's service range and the signal strength is good.
- Your tablet is not in Airplane mode.

If the problem persists, contact Lenovo for technical support.

Multitouch screen problems

- **Problem:** The multitouch screen responds slowly or improperly.

Suggested solution: Do the following:

1. Ensure that your hands are clean and dry when touching the screen.
2. Restart your tablet to try again.

If the problem persists, contact Lenovo for technical support.

Battery problem

Problem: The battery does not charge correctly.

Suggested solution: Check if the ac adapter is connected correctly. If the connection is good but the battery still does not charge, contact Lenovo to replace with a new battery.

System problems

- **Problem:** Unable to turn the tablet on.

Suggested solution: Connect your tablet to an ac power outlet using either a dock or the adapter through the provided USB cable to see if the problem is caused by a drained battery. If the problem persists, insert a straightened paper clip into the emergency reset hole. To locate the emergency reset hole, see "Tablet layout" on page 1 . If the problem still persists, contact Lenovo for technical support.

Media problems

- **Problem:** The audio quality is poor or there is no sound output.

Suggested solution: Check and ensure that:

- The speaker is not covered.
- The speaker mute function is disabled.
- If you are using a headset, unplug it, then plug it in again.
- The volume is not turned to the lowest level.

If the problem persists, contact Lenovo for technical support.

- **Problem:** A song, video, or other media file cannot be played.

Suggested solution: Check and ensure that the media file is not corrupted.

External device connection problems

- **Problem:** A connection is not established when you connect the tablet to a computer.

Suggested solution: Ensure that the computer USB cable you are using is the one that is shipped with your tablet.

- **Problem:** Bluetooth devices cannot be located.

Suggested solution: Ensure that:

- Your tablet Bluetooth is switched.
- The Bluetooth feature is activated on the device to which you want to connect.
- Your tablet and the Bluetooth device are within the maximum Bluetooth range (10 m).

If the problem persists, contact Lenovo for technical support.

Recovering from a severe software problem

If your tablet stops responding and you cannot turn off the tablet by pressing and holding the power button, insert a straightened paper clip into the emergency reset hole to reset the tablet. Then restart your tablet. To locate the emergency reset hole, see “Tablet layout” on page 1 .

If you still encounter the same problem after you restart your tablet, reset your tablet and restart it again, you can perform a factory data reset operation. For more information, refer to “Restoring your tablet to the factory default state” on page 37.

Error messages

Message: 0177: Bad SVP data, stop POST task.

Solution: Checksum of the supervisor password in the EEPROM is not correct. The system board should be replaced. Have the tablet serviced.

Message: 0183: Bad CRC of Security Settings in EFI Variable. Enter ThinkPad Setup.

Solution: Checksum of the Security settings in the EFI Variable is not correct. Enter ThinkPad Setup to check Security settings, Press F10 and then press Enter to restart the system. If you still have a problem, have the tablet serviced.

Message: 0187: EAIA data access error

Solution: The access to EEPROM is failed. Have the tablet serviced.

Message: 0188: Invalid RFID Serialization Information Area.

Solution: The EEPROM checksum is not correct (block # 0 and 1). The system board should be replaced, and the box serial number needs to be reinstalled. Have the tablet serviced.

Message: 0189: Invalid RFID configuration information area

Solution: The EEPROM checksum is not correct (block # 4 and 5). The system board should be replaced, and the UUID needs to be reinstalled. Have the tablet serviced.

Message: 0190: Critical low-battery error

Solution: The tablet turned off, because the battery is low. Connect the ac adapter to the tablet and charge the battery.

Message: 0191: System Security - Invalid remote change requested.

Solution: The system configuration change has failed. Confirm the operation and try again. To clear the error, enter the ThinkPad Setup.

Message: 0199: System Security - Security password retry count exceeded.

Solution: This message is displayed if you enter a wrong supervisor password more than three times. Confirm the supervisor password and try again. To clear the error, enter the ThinkPad Setup.

Message: 2200: Machine Type and Serial Number are invalid.

Solution: Machine Type and Serial Number are invalid. Have the tablet serviced.

Message: 2201: Machine UUID is invalid.

Solution: Machine UUID is invalid. Have the tablet serviced.

Errors without messages

- **Problem:** My screen keeps blanking when I do not want it to.

Solution: You can disable any system timers, such as the LCD turn-off timer or the blank timer by doing the following:

1. Start Power Manager.
2. Click the **Power plan** tab, and then select **Maximum Performance** from the predefined power plans.

- **Problem:** When I turn on the tablet, nothing is displayed on the screen and the tablet does not beep while starting up.

Note: If you are not sure whether you heard any beeps, turn off the tablet by pressing and holding the power button for four seconds or more. Turn it on and listen again.

Solution: Ensure that:

- The ac power adapter is connected to the tablet and the power cord is plugged into a working electrical outlet.
- The tablet is turned on. (Turn the power button on again for confirmation.)

If these items are correctly set, and the screen remains blank, have the tablet serviced.

- **Problem:** When I turn on the tablet, only a white cursor is displayed on a blank screen.

Solution: If you have modified a partition on your solid state drive by using partition software, information about that partition, or the master boot record might have been destroyed.

1. Turn off the tablet, and then turn it on again.
2. If you still see only the cursor on the screen, do the following:
 - If you have used the partition software, examine the partition on the solid state drive by using the software, and recover the partition if required.
 - Use either the Rescue and Recovery workspace or the recovery discs to restore the system to the factory state.

If the problem persists, have the tablet serviced.

- **Problem:** My screen goes blank while the tablet is on.

Solution: Your screen saver or power management might have been enabled. Do either of the following:

- Touch the TrackPoint pointing device or the touch pad, or press a key to exit the screen saver.
- Press the power button to resume from sleep or hibernation mode.

Chapter 12. Getting support

This chapter provides information about getting help and support from Lenovo.

Lenovo technical support

After you buy a ThinkPad Tablet 2, register your tablet with Lenovo. Using the registered information, Lenovo can contact you in case of a recall or other severe problems. After you register your tablet with Lenovo, you will receive quicker service when you call Lenovo for help. In addition, some locations offer extended privileges and services to registered users.

To register your tablet with Lenovo, do either of the following:

- Go to <http://www.lenovo.com/register> and follow the instructions on the screen.
- Tap **Lenovo Settings** from the Start screen. Then tap **Register**.

Technical support information is available on the Lenovo Support Web site at <http://www.lenovo.com/support>.

This Web site is updated with the latest support information such as the following:

- Drivers and software
- Diagnostic solutions
- Product and service warranty
- Product and parts details
- User guides and manuals
- Knowledge base and frequently asked questions

If you need to call the Lenovo Customer Support Center, go to <http://www.lenovo.com/support/phone> for the latest telephone numbers and hours of operation.

During the warranty period, you can get the following services from the Customer Support Center:

- **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) that apply to your hardware available.

For the terms and conditions of the Lenovo Limited Warranty that applies to your tablet, refer to the *Safety, Warranty, and Setup Guide* that comes with your tablet.

Locating the machine type and model (MTM) number and the system serial number

When calling for technical assistance, you are requested to provide the MTM number and the system serial number of your tablet. To get the MTM number and the serial number, check the MTM label affixed on the bottom cover.



Figure 11. Location of the MTM label

Lenovo user forums

Lenovo provides user forums on the World Wide Web to provide you with a place to search the community knowledge base for information about your tablet, share information with other users, make suggestions to Lenovo, ask questions, and get technical support from Lenovo.

To go to Lenovo user forums, do one of the following:

- **Procedure 1**

1. From the Start screen, tap **Lenovo Settings**. Then tap **Register**. Follow the onscreen instructions to create an account.
2. From the Start screen, tap **Lenovo Support** → **Lenovo Forums**.

- **Procedure 2**

1. Go to <http://www.lenovo.com/register> and follow the onscreen instructions to create an account.
2. Go to <http://www.lenovo.com/support>.
3. Tap **Lenovo Community**.

Finding ThinkPad options

If you want to expand the capabilities of your tablet, Lenovo has a number of hardware accessories and upgrades to meet your needs.

You can shop at Lenovo 24 hours a day, 7 days a week directly over the World Wide Web. All you need is an Internet connection and a credit card.

To shop at Lenovo, go to:

<http://www.lenovo.com/accessories/services/index.html>

Appendix A. Regulatory information

This appendix provides regulatory information.

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 802.11b/g Standard, 802.11a/b/g or 802.11n draft 2.0 on Wireless LANs, as defined and approved by the Institute of Electrical and Electronics Engineers.
- The Wireless Fidelity (Wi-Fi) certification as defined by the Wi-Fi Alliance.

The Bluetooth card in your tablet is designed to be interoperable with any Bluetooth product that is compliant to Bluetooth Specification 2.1+EDR as defined by the Bluetooth SIG. The following profiles are supported by your Bluetooth card:

- Audio Gateway
- AV
- Generic Object Exchange
- Generic Object Push
- Human Interface Devices (Keyboard/Mouse)
- Personal Area Network
- Serial Port
- Service Discovery

Usage environment and your health

Integrated wireless cards 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 such as mobile phones.

Due to the fact that integrated wireless cards operate within the guidelines found in radio frequency safety standards and recommendations, Lenovo believes they 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 situations or environments, the use of integrated wireless cards might be restricted by the proprietor of the building or responsible representatives of the organization. These situations and areas might for example include:

- Using the integrated wireless cards onboard of airplanes, in hospitals or near petrol stations, blasting areas (with electro-explosive devices), medical implants or body-worn electronic medical devices.
- 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, you are encouraged to ask for authorization to use integrated wireless cards prior to turning on the tablet.

Location of the UltraConnect wireless antennas

The ThinkPad Tablet 2 features an integrated diversity antenna system built into the display for optimal reception, enabling wireless communication wherever you are.

The following illustration shows the location of each built-in wireless antenna.

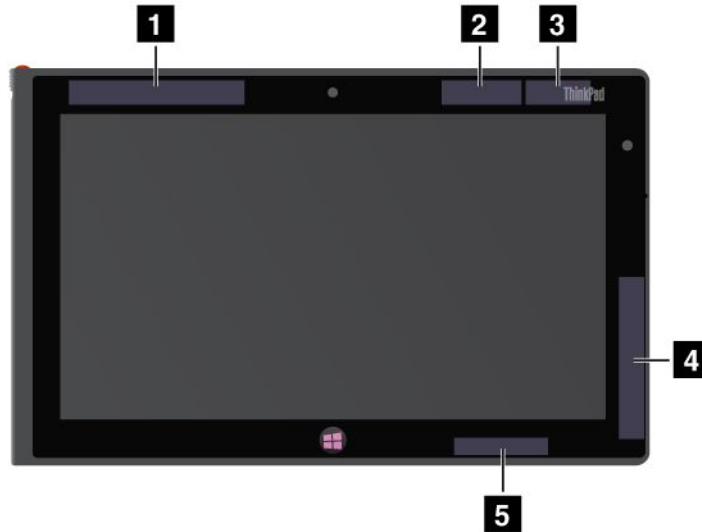


Figure 12. Location of the UltraConnect wireless antennas

- 1 Wireless WAN antenna (Main)
- 2 GPS antenna
- 3 Wireless LAN antenna (Main)
- 4 Wireless WAN antenna (Auxiliary)
- 5 Wireless LAN antenna (Auxiliary)

Export classification notice

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.

Electronic emission notices

The following information refers to the ThinkPad Tablet 2 machine types 3679 and 3682.

Federal Communications Commission (FCC) Declaration of Conformity

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, might 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 using other than specified or recommended cables and 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 might not cause harmful interference, and (2) this device must accept any interference received, including interference that might cause undesired operation.

Responsible Party:

Lenovo (United States) Incorporated

1009 Think Place - Building One

Morrisville, NC 27560

Phone Number: 919-294-5900



Industry Canada Class B emission compliance statement

This Class B digital apparatus complies with Canadian ICES-003.

Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

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 nonrecommended 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: Lenovo, Einsteinova 21, 851 01 Bratislava, Slovakia



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.

Korea Class B compliance statement

B급 기기 (가정용 방송통신기자재)
이 기기는 가정용(B급) 전자파적합기기로서 주로 가정에서 사용하는 것을 목적으로 하며, 모든 지역에서 사용할 수 있습니다.

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が、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 products which connect to the power mains with rated current less than or equal to 20 A 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

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：0800-000-702

Additional regulatory information

For more information about the wireless regulatory notices, refer to the *Regulatory Notice* that came with your tablet.

If your tablet is shipped without the *Regulatory Notice*, you can obtain a PDF version from the Lenovo Web site at:
<http://www.lenovo.com/ThinkPadUserGuides>

Appendix B. Environmental, recycling, and disposal information

Lenovo 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. For information on recycling Lenovo products, go to:
<http://www.lenovo.com/recycling>

Japan recycling statements

環境配慮に関して

本機器またはモニターの回収リサイクルについて

企業のお客様が、本機器が使用済みとなり廃棄される場合は、資源有効利用促進法の規定により、産業廃棄物として、地域を管轄する県知事あるいは、政令市長の許可を持った産業廃棄物処理業者に適正処理を委託する必要があります。また、弊社では資源有効利用促進法に基づき使用済みパソコンの回収および再利用・再資源化を行う「PC回収リサイクル・サービス」を提供しています。詳細は、
<http://www.lenovo.com/recycling/japan>をご参照ください。

また、同法により、家庭で使用済みとなったパソコンのメーカー等による回収再資源化が2003年10月1日よりスタートしました。詳細は、
<http://www.lenovo.com/recycling/japan>をご参照ください。

重金属を含む内部部品の廃棄処理について

本機器のプリント基板等には微量の重金属（鉛など）が使用されています。使用後は適切な処理を行うため、上記「本機器またはモニターの回収リサイクルについて」に従って廃棄してください。

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, visit the Lenovo Web site at <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, visit the Lenovo Web site at <http://www.lenovo.com/recycling/japan>.

Disposing of Lenovo computer components

Some Lenovo computer products sold in Japan might 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 of disused lithium batteries from Lenovo computers

A button-shaped lithium battery is installed on the system board of your Lenovo computer to provide power to the computer clock while the computer is off or disconnected from the main power source. If you want to replace it with a new one, contact your place of purchase or ask for a repair service provided by Lenovo. If you have replaced it by yourself and want to dispose of the disused lithium battery, insulate it with vinyl tape, contact your place of purchase, and follow their instructions. If you use a Lenovo computer at home and need to dispose of a lithium battery, you must comply with local ordinances and regulations.

Disposing of 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/>.

Recycling information for Brazil

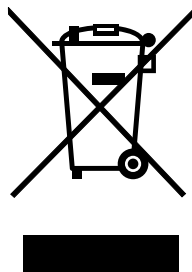
Declarações de Reciclagem no Brasil

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, informando o modelo, número de série e cidade, a fim de enviarmos as instruções para o correto descarte do seu produto Lenovo.

Important WEEE information



The WEEE marking on Lenovo products applies to countries with WEEE and e-waste regulations (for example, European Directive 2002/96/EC, India E-Waste Management & Handling Rules, 2011). Appliances are labeled in accordance with local regulations concerning waste electrical and electronic equipment (WEEE). These regulations determine the framework for the return and recycling of used appliances as applicable within each geography. This label is applied to various products to indicate that the product is not to be thrown away, but rather put in the established collective systems for reclaiming these end of life products.

Users of electrical and electronic equipment (EEE) with the WEEE marking must not dispose of end of life EEE as unsorted municipal waste, but use the collection framework available to them for the return, recycle, and recovery of WEEE and to 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 information for Taiwan



廢電池請回收

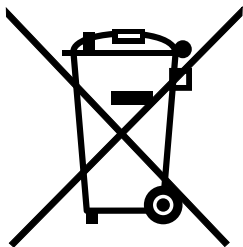
Battery recycling information for the United States and Canada



US & Canada Only

Battery recycling information for the European Union

EU



Notice: This mark applies only to countries within the European Union (EU).

Batteries or packaging for batteries are labeled in accordance with European Directive 2006/66/EC concerning batteries and accumulators and waste batteries and accumulators. The Directive determines the framework for the return and recycling of used batteries and accumulators as applicable throughout the European Union. This label is applied to various batteries to indicate that the battery is not to be thrown away, but rather reclaimed upon end of life per this Directive.

In accordance with the European Directive 2006/66/EC, batteries and accumulators are labeled to indicate that they are to be collected separately and recycled at end of life. The label on the battery may also

include a chemical symbol for the metal concerned in the battery (Pb for lead, Hg for mercury, and Cd for cadmium). Users of batteries and accumulators must not dispose of batteries and accumulators as unsorted municipal waste, but use the collection framework available to customers for the return, recycling, and treatment of batteries and accumulators. Customer participation is important to minimize any potential effects of batteries and accumulators on the environment and human health due to the potential presence of hazardous substances. For proper collection and treatment, go to:
<http://www.lenovo.com/recycling>

China recycling information for Waste Electrical and Electronic Equipment (WEEE)

《废弃电器电子产品回收处理管理条例》提示性说明

联想鼓励拥有联想品牌产品的用户当不再需要此类产品时，遵守国家废弃电器电子产品回收处理相关法律法规，将其交给当地具有国家认可的回收处理资质的厂商进行回收处理。更多回收服务信息，请点击进入
<http://support.lenovo.com.cn/activity/551.htm>.

Appendix C. Notices

Lenovo might 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 might be used. Any functionally equivalent product, program, or service that does not infringe any Lenovo intellectual property right might 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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*Lenovo (United States), Inc.
1009 Think Place - Building One
Morrisville, NC 27560
U.S.A.
Attention: Lenovo Director of Licensing*

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Any performance data contained herein was determined in a controlled environment. Therefore, the result obtained in other operating environments might vary significantly. Some measurements might 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 might have been estimated through extrapolation. Actual results might vary. Users of this document should verify the applicable data for their specific environment.

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- Lenovo
- ThinkPad
- TrackPoint
- UltraConnect

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

Appendix D. Restriction of Hazardous Substances Directive (RoHS)

China RoHS

产品中有害有毒物质或元素的名称及含量

部件名称	有害有毒物质或元素					
	铅(Pb)	汞(Hg)	镉(Cd)	六价铬(Cr(VI))	多溴联苯(PBB)	多溴二苯醚(PBDE)
印刷电路板组件*	X	O	O	O	O	O
硬盘	X	O	O	O	O	O
光驱	X	O	O	O	O	O
内存	X	O	O	O	O	O
电脑I/O 附件	X	O	O	O	O	O
电源	X	O	O	O	O	O
键盘	X	O	O	O	O	O
鼠标	X	O	O	O	O	O
机箱/附件	X	O	O	O	O	O

○:表示该有害有毒物质在该部件所有均质材料中的含量均在SJ/T11363-2006标准规定的限量要求以下
 ×:表示该有害有毒物质至少在该部件的某一均质材料中的含量超出SJ/T11363-2006标准规定的限量要求
 表中标有“×”的所有部件都符合欧盟RoHS 法规。

印刷电路板组件*: 包括印刷电路板及其零部件、电容和连接器
 根据型号的不同,可能不会含有以上的所有部件,请以实际购买机型为准



在中华人民共和国境内销售的电子信息产品必须标识此标志,标志内的数字代表在正常使用状态下的产品的环保使用期限

Turkish RoHS

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).

Türkiye EEE Yönetmeliğine Uygunluk Beyanı

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.

Ukraine RoHS

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

India RoHS

RoHS compliant as per E-Waste (Management & Handling) Rules, 2011.

ThinkPad®

Part Number:

Printed in

(1P) P/N:

