Lenovo ThinkPad X1 Carbon Gen 12

Lenovo ThinkPad X1 Carbon Gen 12 Laptop User Manual

Model: ThinkPad X1 Carbon Gen 12

Introduction   What's in the Box   Product Overview   Setup   Operating Instructions   Maintenance

Troubleshooting   Specifications   Warranty & Support

1. INTRODUCTION

This manual provides essential information for setting up, operating, maintaining, and troubleshooting your Lenovo ThinkPad X1 Carbon Gen 12 Laptop. The ThinkPad X1 Carbon Gen 12 is a business notebook designed for performance and durability, featuring an Intel Core Ultra 7 155U Processor, a 14-inch WUXGA 100% sRGB touchscreen, 32GB of 6400MHz RAM, and a 1TB Gen4 Performance SSD, running Windows 11 Pro.

Figure 1.1: Lenovo ThinkPad X1 Carbon Gen 12 Laptop

2. WHAT'S IN THE BOX

Upon unboxing your Lenovo ThinkPad X1 Carbon Gen 12, ensure all the following items are present:

- ThinkPad X1 Carbon Gen 12 Laptop PC
- Internal Battery (pre-installed)
- USB-C Power Adaptor

3. PRODUCT OVERVIEW

3.1 Ports and Connectors

The ThinkPad X1 Carbon Gen 12 features a variety of ports for connectivity. Familiarize yourself with their locations and functions:

Figure 3.1: Port Layout

1. **USB-A (5Gbps)**: Standard USB port for connecting peripherals.
2. **2 x USB-C Thunderbolt 4 (40Gbps)**: High-speed ports for data transfer, video output, and charging.
3. **Optional SIM slot (Available Spring 2024)**: For mobile broadband connectivity.
4. **Power button**: To turn the laptop on or off.
5. **Headphone / mic combo**: Single jack for audio input and output.
6. **USB-A (5Gbps)**: Another standard USB port.
7. **HDMI 2.1**: For connecting to external displays.
8. **Kensington Nano Security Slot**: For physical security locking.

3.2 Keyboard and Touchpad

The ThinkPad X1 Carbon Gen 12 features a redesigned keyboard and a larger glass touchpad. The keyboard includes tactile markings on certain keys to assist touch typists. The 120mm glass touchpad is larger than previous models and retains the traditional ThinkPad buttons at the top. The TrackPoint pointing stick, located in the middle of the keyboard, offers an alternative navigation method.

You Spoke. We Listened: We've Redesigned Our Legendary Keyboard

Our redesigned ThinkPad keyboard now includes tactile markings to help people with visual impairments more easily find the correct keys. We've moved the fingerprint reader to the keyboard, resulting in a larger sensor for a better experience. Plus, our TrackPad is even larger now, at 120mm / 4.72". Our beloved red TrackPoint still lets you navigate — but with a double tap, it opens the ThinkPad TrackPoint Quick Menu to optimize audio-visuals, set alerts against muting, and even take notes with the Dictation Toolbar for handy speech-to-text transcription.

Figure 3.2: Keyboard and Touchpad

3.3 Display and Camera

The laptop is equipped with a 14-inch WUXGA (1920 x 1200) IPS touchscreen display with anti-glare properties, 100% sRGB color gamut, and 400 nits brightness. It features a 1080P FHD IR+RGB camera with a privacy shutter, positioned within the Communications Bar at the top of the display.

4. SETUP

4.1 Initial Power On

1. Unpack the laptop and power adapter.
2. Connect the USB-C power adapter to one of the Thunderbolt 4 ports on the laptop and plug it into a power outlet.
3. Open the laptop lid. The power button is located on the side. Press the power button to turn on the device.
4. Follow the on-screen instructions to complete the initial Windows 11 Pro setup, including language selection, network connection, and user account creation.

4.2 Connecting Peripherals

Use the available USB-A and USB-C ports to connect external devices such as mice, keyboards, external drives, or monitors. The HDMI 2.1 port allows for connection to external displays.

5. OPERATING INSTRUCTIONS

5.1 Basic Operation

- **Power On/Off**: Press the power button to turn on. To shut down, click Start > Power > Shut down in Windows.
- **Sleep Mode**: Close the lid or click Start > Power > Sleep to enter sleep mode.
- **Restart**: Click Start > Power > Restart.

5.2 Using the TrackPoint and Touchpad

- **TrackPoint**: Use the red TrackPoint pointing stick to move the cursor. The three buttons below the spacebar function as left-click, scroll, and right-click for the TrackPoint.
- **Quick Menu**: Double-tapping the TrackPoint pointing stick activates a Quick Menu for microphone settings, output device selection, and voice-to-text functionality.
- **Touchpad**: Use the glass touchpad for multi-touch gestures. The integrated buttons at the bottom of the touchpad function as left and right clicks.

5.3 Camera and Microphone Usage

The integrated FHD IR+RGB camera and dual-microphone array are optimized for video conferencing. Ensure the privacy shutter is open when using the camera. The ThinkPad X1 Carbon Gen 12 is Zoom-certified and includes Dolby Voice and Dolby Atmos for enhanced audio experiences.

Engineered for a No-Compromise Experience

The Intel® Evo™ Edition, ThinkPad X1 Carbon Gen 12 laptop is engineered to do it all. Experience all-day battery life, instant wake, and best-in-class connectivity. No matter what tasks you tackle, this device is highly responsive. Plus, with Intel® Unison™, you can sync your laptop with any iOS or Android smartphone and then call or text, and even transfer files, photos, and videos all from the convenience of your PC.

Unleash Software Superpowers

Get the most out of your device with preinstalled Lenovo apps. Lenovo View is an AI-based camera app that enhances video quality and provides intelligent collaboration, privacy, and digital wellness features. Lenovo Vantage centralizes settings to safeguard data, automate updates, and improve performance — or Lenovo Commercial Vantage for IT manageability. We make it easier and safer to do your job well.

Figure 5.1: Laptop in use for video conferencing

5.4 Connectivity

- **Wi-Fi**: Connect to wireless networks using the integrated Wi-Fi 6E AX211 2x2 AX.
- **Bluetooth**: Pair Bluetooth devices such as headphones or mice using Bluetooth 5.3.
- **Intel Unison**: Sync your laptop with iOS or Android smartphones for calls, texts, and file transfers.

5.5 Blue Light Protection

The display is Eyesafe Certified, providing always-on blue light protection to reduce eye strain during extended use.

5.6 Security Features

The ThinkPad X1 Carbon Gen 12 includes a fingerprint reader and facial recognition for secure login. ThinkShield provides a comprehensive suite of security solutions, including a discrete Trusted Platform Module (dTPM) for data encryption. Intel vPro offers hardware-based security and remote management capabilities.

Elevated Performance & Lasting Battery

The ThinkPad X1 Carbon Gen 12 boasts the world's first laptop powered by Intel® Core™ Ultra processors, making it ideal for creating and on-the-go productivity. Enjoy optimized performance with workloads pushed to dedicated AI engines, including the low-power neural processing unit (NPU) for sustained tasks and resilient battery life.

Go ahead, turn on auto-framing or low-light enhancement for your online meetings, even when unplugged! Choose the Intel vPro® Evo™ Edition, for multilayer security, professional-grade performance, reliable stability, and complete management for IT.

Figure 5.2: Laptop in a typical work setting

6. MAINTENANCE

6.1 Cleaning Your Laptop

- Use a soft, lint-free cloth lightly dampened with water or a screen cleaner to clean the display.
- For the keyboard and chassis, use a soft cloth. Avoid harsh chemicals or abrasive materials.
- Ensure the laptop is powered off and unplugged before cleaning.

6.2 Battery Care

- To prolong battery life, avoid extreme temperatures.
- Periodically discharge and recharge the battery.
- For long-term storage, charge the battery to approximately 50-60% and store the laptop in a cool, dry place.

6.3 Software Updates

Regularly update your Windows operating system and Lenovo drivers to ensure optimal performance and security. Use Windows Update and the Lenovo Vantage application for this purpose.

7. TROUBLESHOOTING

This section addresses common issues you might encounter. For more complex problems, refer to Lenovo's official support resources.

7.1 Power Issues

- **Laptop does not turn on**: Ensure the power adapter is securely connected and the outlet is functional. Try holding the power button for 10-15 seconds to perform a hard reset.
- **Battery not charging**: Verify the power adapter is working. Check for any damage to the cable or port.

7.2 Display Problems

- **No display on screen**: Connect an external monitor to check if the issue is with the laptop's display. Ensure the display brightness is not set to minimum.
- **Flickering screen**: Update your graphics drivers.

7.3 Connectivity Problems

- **Wi-Fi not connecting**: Check if Wi-Fi is enabled in Windows settings. Restart your router and the laptop.
- **Bluetooth device not pairing**: Ensure the Bluetooth device is in pairing mode and within range. Check Bluetooth settings on your laptop.

7.4 Keyboard/Touchpad Unresponsive

- Restart the laptop.
- Check for any physical obstructions or debris.
- Ensure drivers are up to date via Lenovo Vantage or Device Manager.

8. SPECIFICATIONS

Below are the detailed technical specifications for the Lenovo ThinkPad X1 Carbon Gen 12 Laptop (Model: Ultra 7 155U, WUXGA Touch):

How Do You Show Respect for the Planet?

The Lenovo ThinkPad X1 Carbon Gen 12 (14" Intel) laptop still uses carbon fiber for the chassis — but better yet some of that carbon fiber is recycled from post-industrial remnants and is used along with 90% recycled magnesium. Plus, the chassis, the battery pack, the speaker enclosure, and the power adapter all include recycled post-consumer content. And we don't stop there. The packaging is 100% plastic-free and comprised in part with rapid-renewable materials made from bamboo-sugar-cane fiber.

Figure 8.1: Intel Core Ultra 7 Processor and Intel Evo Edition

Feature	Detail
Processor	Intel Core Ultra 7 155U (E-cores up to 3.80 GHz, P-cores up to 4.80 GHz), 12 Core (2 P-core + 8 E-core + 2 LPE-core), 14 threads, 12MB Cache, Intel AI Boost
RAM	32 GB LPDDR5X-6400MHz (Soldered)
Storage	1 TB SSD M.2 2280 PCIe Gen4 Performance TLC Opal
Display	14" Touch WUXGA (1920 x 1200), IPS, Anti-Glare, 100% sRGB, 400 nits, 60Hz, Low Power, 1000:1 Contrast Ratio, 16:10 Aspect Ratio
Graphics	Integrated Intel Graphics

Camera	1080P FHD IR+RGB with Privacy Shutter
Battery	Integrated Li-Polymer 57Wh
Connectivity	Wi-Fi 6E AX211 2x2 AX, Bluetooth 5.3
Ports	2x USB-A (5Gbps), 2x USB-C Thunderbolt 4 (40Gbps), HDMI 2.1, Headphone/mic combo
Operating System	Windows 11 Pro
Dimensions (LxWxH)	12.31 x 8.45 x 0.59 inches
Weight	Approximately 2.4 lbs
Color	Black

9. WARRANTY AND SUPPORT

9.1 Warranty Information

The Lenovo ThinkPad X1 Carbon Gen 12 comes with a One Year Onsite Lenovo Warranty. Users have the option to extend their coverage by adding up to 5 years of Lenovo Premier Support upon registering their computer with Lenovo.

9.2 Customer Support

For technical assistance, warranty claims, or further information, please visit the official Lenovo support website or contact their customer service. Ensure you have your product's serial number available when seeking support.
Lenovo Support Website: support.lenovo.com