

# Introduction to the Use and Care of the IBM ThinkPad T42

## IBM ThinkPad T42 Specifications

---

### Physical Specifications of IBM ThinkPad T42

Height:	31.4 mm/26.6 in
Width:	311 mm/12.2 in
Depth:	255 mm/10 in
Weight:	5 lbs
Battery life:	4 hrs
Battery type:	Lithium-Ion
Charge time - on/off:	3 hrs/ 3 hrs

---

### Cleaning Instructions

Before you clean your computer turn it off, unplug it from the power source, and remove the battery.

Use a soft cloth moistened with a non-alkaline detergent to wipe the exterior of the computer. Gently wipe the LCD with a dry, soft cloth. Do not use alcohol or detergent to clean the LCD. Do not spray cleaner directly on the display or keyboard.

### Handling Instructions

Laptops are extremely delicate and should be handled with care. Dropping or damaging them, such as allowing them to get wet, can easily result in them ceasing to function properly. If this happens refer to Chapter 2 of the ThinkPad T42 Series Service and Troubleshooting Guide. If the problem persists after referring to Chapter 2, call (304) 293-3631 for assistance.

When traveling with your T-42, do not check the computer as baggage. You can put your computer through an X-ray machine but never allow it to be put through a metal detector. If the computer is checked by hand make sure that you have a charged battery available to ensure that you can turn it on for security personnel.

Protect your computer, battery, hard-disk drive, CD-RW / DVD drive from environmental hazards such as dirt, dust, food, liquids, temperature extremes, and overexposure to sunlight.

When you move your computer between environments with very different temperatures and/or humidity ranges, condensation may form on or within the computer. To avoid damaging the computer, allow sufficient time for the moisture to evaporate before using the computer.

When taking the computer from low-temperature conditions into a warmer environment or from a high-temperature condition into a cooler environment, allow the computer to acclimate to room temperature before turning on power.

### ThinkPad Do Nots:

- Do not subject your computer to physical punishment, such as dropping or bumping.
- Do not place heavy objects on your computer.
- Do not pour liquid onto your computer.

- Do not use your computer in or near water (to avoid the danger of electrical shock).
- Do not pack your computer in a tightly packed suitcase or bag. Your LCD might be damaged.
- Remove any media from the CD-RW / DVD drive before moving your computer.
- Keep the computer at least 13 cm (5 in.) away from any electrical appliance that generates a strong magnetic field such as a motor, magnet, TV, refrigerator, or large audio speaker.
- Use your computer when temperatures are between 5°C to 35°C (41°F to 95°F), between 1°C to 35°C (50°F to 95°F) when operating with diskettes.
- Do not disassemble the computer.
- Do not place any objects between the display and the keyboard or under the keyboard.
- Do not pick up or hold your computer by the display. When picking up your open computer, hold it by the bottom (keyboard) half.
- Do not scratch, twist, hit, or push the surface of the LCD (Liquid Crystal Display).
- Do not modify or tape the latches to keep the display open or closed.
- Do not turn your computer over while the ac adapter is plugged in. This could break the adapter plug.
- Do not put an operating cellular phone on the computer. The phone might cause a computer system to malfunction.
- Do not hard-mount your computer in a vehicle or anywhere that is subject to strong vibration.
- Do not crush, drop, or physically punish the external or removable hard disk, or CD-RW / DVD drive when it is outside your computer.
- Do not touch the lens on the CD-RW / DVD tray.
- Do not close the CD-RW / DVD tray until you hear the CD-RW / DVD click into the center pivot of the CD-RW / DVD drive.
- Do not write to a CD-R / CD-RW if the computer is vibrating. Vibration may result in errors or damaged CD's.
- Do not touch the surface of a compact disc (DVD, CD-R, CD-RW); handle the disc only by its edges.
- Do not connect the modem to a PBX (private branch exchange) or other digital telephone extension line. **Your computer's modem can only use analog service via a public-switched telephone network (PSTN).** Use of a phone line other than PSTN can damage your modem. If you are not sure which kind of phone line you are using, contact your telephone company. Many hotels or office buildings use digital telephone extension lines, so check before connecting the telephone cables in such places.
- Do not leave the base of your computer in contact with your lap or any part of your body for an extended period when the computer is functioning or the battery is charging. The heat generated by the normal functioning of the computer can cause discomfort or, eventually, skin burn.
- Do not open the display beyond 180 degrees, as this might damage the computer hinge.

**NOTE:** Most of the text contained in the “Handling Instructions” section was taken from the ThinkPad T42 Service and Troubleshooting Guide, pages 6-9, and under the IBM Access information sources guide on your computer.

**NOTE:** Remove the battery pack and keep it in a cool place if you will not be using the computer for a long period of time.



## Turning on and Shutting Down the Machine

Using the display latch on the right corner of the laptop, open the laptop. Press the power button on the upper portion of the keyboard. This will turn the computer on and start Windows XP.



To shut down the computer, move the mouse pointer to the Start button in the lower left hand corner of the display. Click the left touch pad button and choose Shut Down. From the choices listed in the “Shut Down Windows” dialog box choose “Shut Down” and click “OK”. The Windows XP operating system installed on the ThinkPad T42 is pre-set to automatically turn off the power to the computer when you go through the shut down procedure.

In the event that there is a fatal error and the laptop freezes completely you will need to manually reset the computer. In order to do this you must press the power button and hold it down until the computer shuts down. When you restart the machine you will receive an error that reads “Windows was not properly shutdown. One or more of your disk drives may have errors on it, and the ScanDisk program will automatically run on these drives....” Once the ScanDisk is complete, Windows XP will start normally.

## Notes on the CD-RW / DVD Drive

The CD-RW / DVD Drive for the ThinkPad T42 has a slightly different drive configuration than those found on desktop PCs. When using a desktop CD-RW / DVD drive the device will eject a platter that allows you to simply place a disk into the drive and then close it. However, laptops are slightly different. With a laptop CD-RW / DVD drive the disk rotor head is exposed at the bottom of the platen. When inserting a CD-RW / DVD it is necessary to firmly press the disk down on top of the rotor head until the three spring loaded disk stabilizers have been compressed and the CD-RW / DVD clicks into position.

CD-RW is a type of CD disk that enables users to write onto it in multiple sessions, whereas with CD-R disks they can only be written to once. With CD-RW drives and disks, they can be treated like a floppy or hard disk, writing data onto it multiple times. In other words, CD-RW's can have their data erased and overwritten by new data.

## Using the UltraNav

IBM ThinkPads have what they refer to as a UltraNav system which includes a TrackPoint (R) stick with TrackPoint buttons, the UltraNav Touch pad, and touch pad buttons as opposed to an external mouse used as the pointing device.

The TrackPoint is used by placing your finger on the red toggle located between the letters “G”, “H” and “B” on the keyboard and moving your finger in the direction you wish the mouse pointer to go. The buttons below the spacebar correspond with the left and right mouse button found on a two-button mouse.

The third button (blue), located in between the TrackPoint click buttons, is the scroll bar. It is used to scroll Web pages and documents in any direction without using the graphic scroll bars on the side of the window. Many people find the TrackPoint difficult to use and it does require some practice before you are accustomed to it.

The ThinkPad T42 also contains the UltraNav touch pad where you move your fingertip across the UltraNav touch pad to move the cursor, and the touch pad buttons operate the same as the left and right mouse buttons. A USB mouse may be attached to the laptop and used as an alternative to the TrackPoint and Touch pad.

## Battery Care, Charging and Removal

ThinkPads like all laptops are battery powered and issues such as battery life and charging can make a huge difference in how useful your computer will be for you. Here are some tips to help you to monitor and conserve your battery’s charge and preserve it for the long term.

IBM provides a program called the “Battery MaxMiser Gauge” which allows you to monitor how much of your battery’s charge remains. This program displays a battery icon in the system tray, in the lower right corner of the screen. It displays the percentage of charge left in the battery.

## Battery and Standby Status

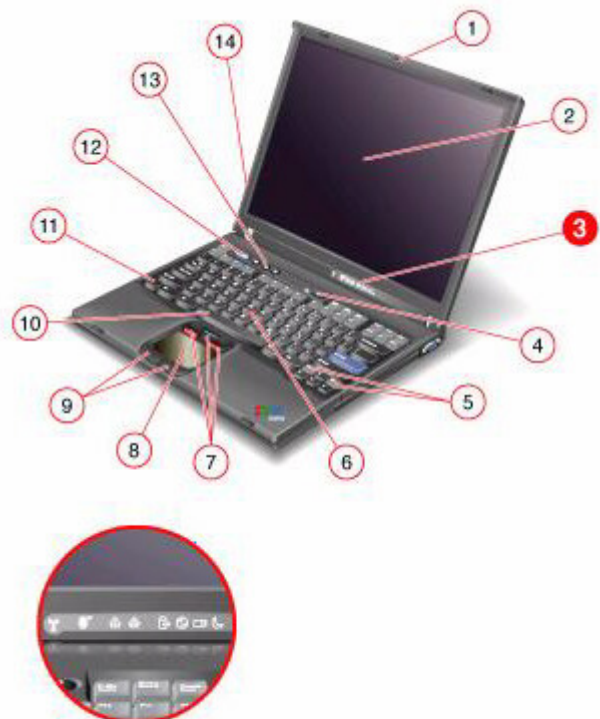
The computer has status indicators that show the mode the computer is in--standby, hibernation, or normal--and the status of the battery. The following shows the location and the meaning of the indicators:

1. Battery status



### UltraNav(TM)

- 6. TrackPoint(R) pointing stick
- 7. TrackPoint buttons
- 8. Touch pad
- 9. Touch pad buttons



3. System and power-status indicators

- Green: The battery is fully charged.
  - Blinking green: The battery is being charged though it still has enough power to operate. (At regular intervals, the indicator light turns off briefly.)
  - Orange: The battery is being charged, but the battery power is still low.
  - Blinking orange: The battery pack needs to be charged. When the indicator starts blinking orange, the computer beeps three times.
2. Standby status
- Green: The computer is in standby mode.
  - Blinking green: The computer is entering standby or hibernation mode, or is resuming normal operation.

## **In Order to Maximize Your Battery's Life We Recommend:**

**Once per month fully discharging and fully recharging your battery.**

### ***To Charge a Battery***

1. Once per month, fully discharge your battery by using it on battery power until the battery is down to less than 10 percent.
2. If the computer is not shut down, turn it off now. To identify if the power is off, look to see if the power indicator is dark.
3. Connect the AC adapter to the computer.
4. Plug the AC adapter into the wall.
5. Fully recharge the battery.

### ***To Remove a Battery***

1. If the computer is not shut down, turn it off now. To identify if the power is off, look to see if the power indicator is dark. Close the Notebook. When removing the battery, if the power is not turned off on the laptop, it could damage the machine if the current is flowing when the device is removed.
2. Turn the computer over so that you are looking at the bottom of the machine.
3. Locate the **battery lock switch**, slide and hold the switch to the unlock position.
4. Place your fingers in the notch located at the top of the battery and your thumb at the bottom of the battery.
5. Lift the battery out of the computer.

## **Parts of a ThinkPad T42**

### **Front View**



### 1. ThinkLight(TM)

Use the ThinkPad(R) computer under less than perfect lighting conditions. The ThinkLight(TM) device illuminates the keyboard. Fn +PgUp



### 2. Computer display

The high-resolution, thin-film transistor (TFT) display provides clear and brilliant text and graphics.



### 3. System and power-status indicators

Your computer has system and power status indicators: Standby status, Battery status, Power on, Drive access, Caps lock, Numeric lock, Bluetooth status, and Wireless status.



### 4. Power switch

Use the power switch to turn on the computer. To turn off your computer, use the Start menu shutdown options. The power switch can also be programmed to shut down the computer or put it into standby, sleep, or hibernation.

If you cannot turn off the computer by this method, press and hold the power switch for 2 seconds.



If your computer stops responding, and you cannot turn it off, press and hold the power switch for 4 seconds or more. If the system is still not reset, remove the ac adapter and the battery.

### 5. Forward and Back keys

The Forward and Back keys on your keyboard near the cursor-control keys are used with your Internet browser, such as Netscape Navigator and Internet Explorer. They function like the forward and back arrows in the browser that move you back and forward to pages you have viewed in the order that you opened them.



### UltraNav(TM)

#### 6. TrackPoint(R) pointing stick

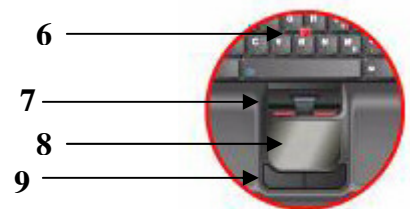
#### 7. TrackPoint buttons

#### 8. Touch pad

#### 9. Touch pad buttons

The keyboard contains the unique TrackPoint pointing device. Pointing, selecting, and dragging are all part of a single process that you can perform without moving your fingers from typing position.

Move your fingertip across the UltraNav touch pad to move the pointer.



The TrackPoint and touch pad buttons provide functions similar to those of a mouse and its buttons.

## 10. Fn+Spacebar

Press Fn+Spacebar to start the FullScreen Magnifier and enlarge the active window.



## 11. Fn key

Use the Fn key to take advantage of ThinkPad(R) functions, such as turning on the ThinkLight(TM). To use ThinkPad functions, press Fn + the required function key marked in blue.



## 12. Access IBM button

Press the Access IBM button to open your on-board help system, which helps answer questions and provides quick access to software tools and key IBM Web sites.



## 13. Volume control buttons

The built-in volume buttons enable you to quickly adjust the volume or mute the sound from your ThinkPad(R) computer.



## 14. Bluetooth antenna

Some ThinkPad(R) models have the Integrated *Bluetooth* features. Not available on this model.

## Right Side View



## 1. UltraConnect(TM) wireless antennas

Some ThinkPad(R) models feature an integrated dual diversity antenna system built into the display for optimal reception, enabling wireless communication wherever you are.



## 2. Hard disk drive

Your computer has a large-capacity, customer-upgradeable hard disk drive that can meet a variety of storage demands. To keep the drive safe, the IBM(R) Hard Drive Active Protection System is installed on your computer. For details, refer to IBM Hard Drive Active Protection System.

If you wish, you can purchase another hard disk drive and install it in the Ultrabay(TM) Slim

## 3. Ultrabay(TM) Slim

Your ThinkPad(R) computer has a bay for Ultrabay devices. The drive that comes with the computer-- CD-RW/DVD drive--is installed in the bay.

**Note:** You can install only a 9.5-mm-thick Ultrabay Slim device in the Ultrabay Slim bay. You cannot install an Ultrabay 2000 device or an Ultrabay Plus device.



## 4. Monitor connector

You can attach an external monitor or a projector to your ThinkPad(R) computer to display computer information.

**Note:** If you attach your computer to the ThinkPad Dock II, the ThinkPad Port Replicator II, or the ThinkPad Mini Dock and use a monitor connector, use the monitor connector on the ThinkPad Dock II, the ThinkPad Port Replicator II, or the ThinkPad Mini Dock, not the one on the computer.



## Left Side View



## 1. Security keyhole

Your ThinkPad(R) computer comes with a security keyhole. You can purchase a security cable and lock to fit this keyhole.



## 2. USB connectors

The Universal Serial Bus (USB) connectors are used for connecting USB interface-compatible devices, such as a printer or digital camera.

When you attach a USB cable to the connector, make sure that the mark shown in the picture above is to the upper side. Otherwise the connector might be damaged.



### 3. Video-out connector

Your ThinkPad(R) Computer has a video-out connector, with which you can attach a television.



### 4. Modem connector

Connect your computer to a telephone line with the modem connector.



### 5. Ethernet connector

Connect your computer to a LAN with the Ethernet connector.

Attention: The Ethernet connector and the modem connector may adjoin each other. Be sure to connect your communication cable to the proper connector. If you connect the telephone cable to the Ethernet connector, the Ethernet connector might be damaged.



Two indicators, to the upper right and the lower right of the connector, show the status of the network connection. When your computer connects to a LAN and a session with the network is available, the upper right indicator is solid green. While data is being transmitted, the lower right indicator blinks yellow.

**Note:** If you attach your computer to the ThinkPad Dock II, the ThinkPad Port Replicator II, or the ThinkPad Mini Dock and use an Ethernet connector, use the Ethernet connector on the ThinkPad Dock II, the ThinkPad Port Replicator II, or the ThinkPad Mini Dock, not the one on the computer.

## Audio jacks

### 6. Stereo headphone jack

### 7. Microphone jack

Experience sounds by connecting a headphone or speakers to the headphone jack. Capture sound by connecting an external audio device (microphone) to the microphone jack.



### 8. Fan louvers

The internal fan and louvers enable air to circulate in the computer and cool the central processor.

**Note:** To avoid impeding exhalation and inhalation, do not place any obstacle in front of the fan.



## 9. PC Card slots

In the two PC Card slots, you can insert numerous PC Cards, such as modem, data storage, network, and SCSI connector cards.

They support the following cards:



### Physical characteristics:

### PC Card type I, II, or III

#### Electrical characteristics:

- 16-bit PC Card
- - CardBus Card

### Bottom View



### 1. Battery

Use your computer with battery power whenever ac power is unavailable.

By installing a second battery, available as an option, in the Ultrabay(TM) Slim, you can extend the operating time of the computer. You can also use the Battery MaxiMiser wizard to adjust your power setting as needed.



Your computer may come with a ThinkPad(R) T40/R50 Series High Capacity Li-Ion Battery for longer battery life. If it does not, you can purchase one and install it.

### 2. Docking connector

With a ThinkPad(R) Dock II, a ThinkPad Mini Dock, or a ThinkPad Port Replicator II, you can extend the computer capabilities when you are in your office or home.

**Note:** A ThinkPad Dock II has an Ultrabay(TM) 2000 with connectors.



### 3. Memory-upgrade slot

You can increase the amount of memory in your computer by installing a memory module in the memory bay. Memory modules are available as options.



### 4. Infrared port

The infrared port enables the computer to communicate with other devices that have infrared data-transfer capability, such as some personal digital assistants (PDAs) and mobile computers.



## 5. Built-in stereo speakers

The stereo speakers are built into your computer.



## 6. Labels for identification

The serial number label identifies your computer. If you contact IBM for help, the serial number will enable IBM support technicians to identify your computer and provide the highest level of service.

The Microsoft Certificate of Authenticity (COA) label for the preinstalled operating system is attached. Printed on this label are the product ID and the product key information for your computer. Record this information and keep it in a safe place. You might need these numbers, to start your computer or reinstall the operating system.



## Rear View



### 1. Power jack

The ac adapter cable connects to the computer power jack to provide power to the computer and charge the battery.

### 2. Parallel connector

The parallel connector can be used to connect a printer or other parallel device, and to transfer data between devices.

