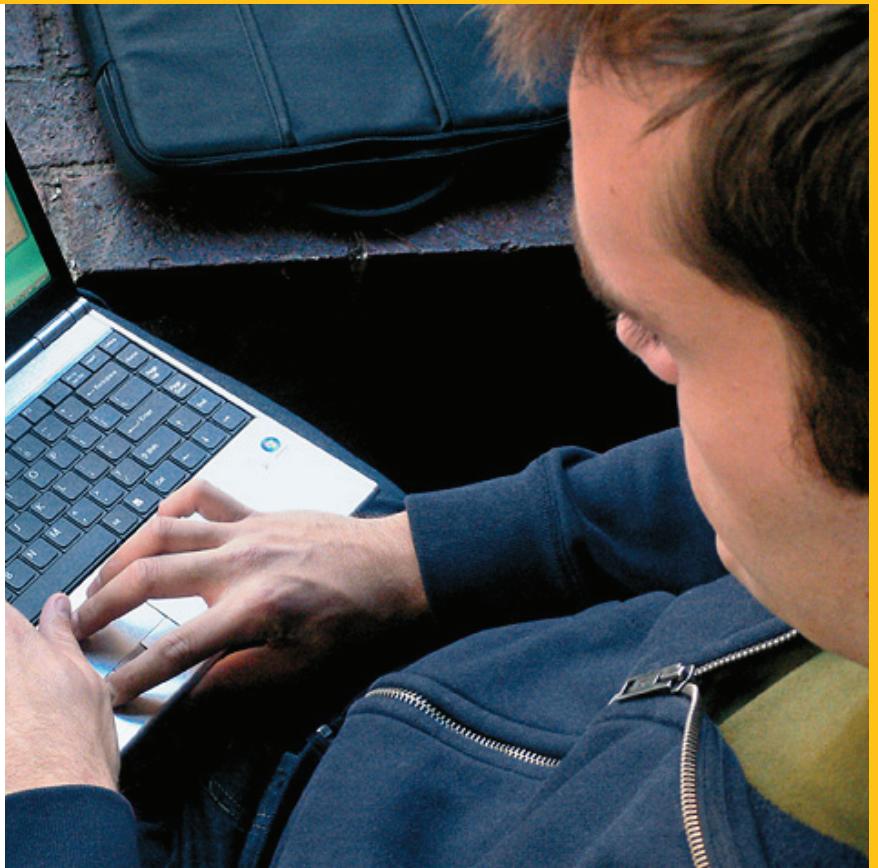


Add New Hardware and Devices

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What You'll Need

- Any hardware or external devices you'd like to add
- A computer running Windows Vista®

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Add devices to Windows Vista

One of the best ways to enjoy Windows Vista and all of its features is to add new devices to your computer. Windows Vista is designed to alleviate much of the aggravation that can come with adding new hardware and devices. With most devices that you plug in, Windows Vista will automatically identify the equipment and install necessary drivers. If it doesn't, there are two things you can do: turn on automatic updating and check for new drivers.

TURN ON AUTOMATIC UPDATING

When you turn on automatic updating, Windows Vista installs all the updates you need as they become available, improving the security and reliability of your PC.

1. Turn on automatic updating by clicking on the **Windows logo** in the bottom left corner of your display, click **All Programs**, then **Windows Update**.

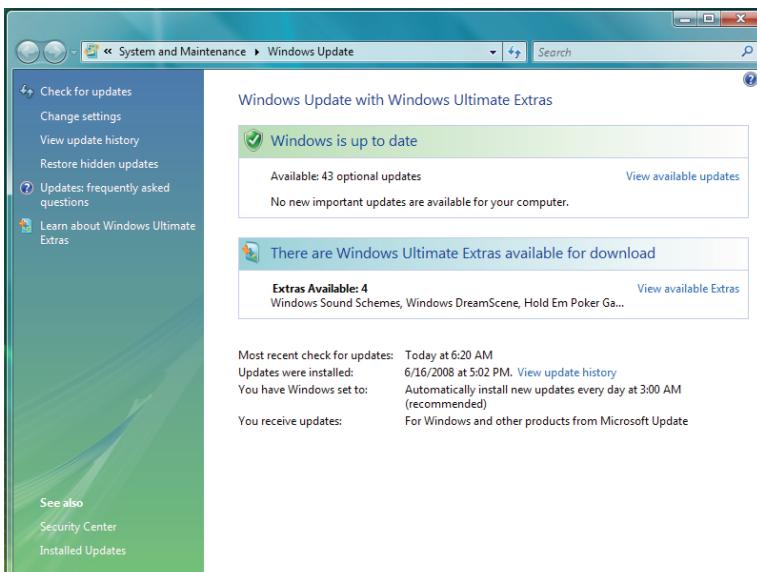


Figure 1—Windows Update

Add devices to Windows Vista *(continued)*

2. In the left pane, click **Change settings**
3. Select **Install updates automatically (recommended)**.

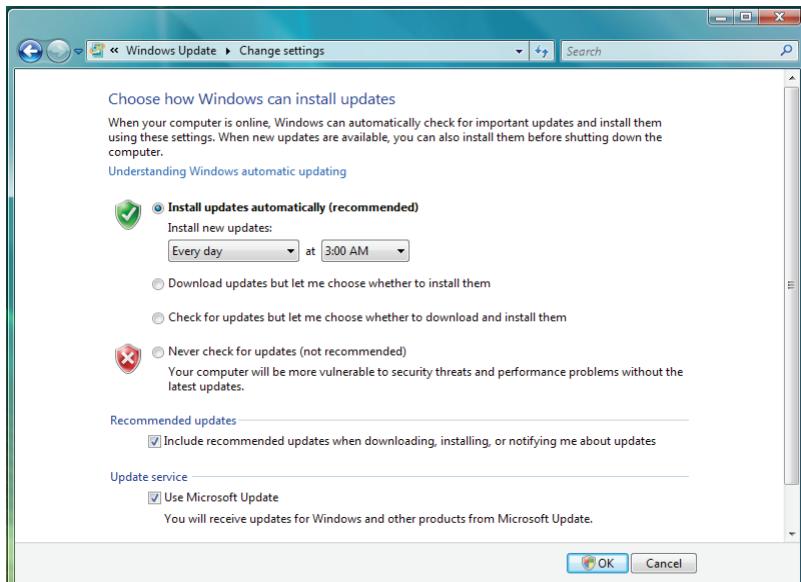


Figure 2—Windows Update's Change settings dialog box.

4. Under **Recommended updates**, check the box to select **Include recommended updates when downloading, installing or notifying me about updates**.
5. Under **Update service**, check the box to select **Use Microsoft Update**.
6. Click **OK**.

You may be prompted for an administrator password, or to click Continue for confirmation.



Automatic updates are downloaded behind the scenes when you're online, so there's no interruption to whatever you're doing while they're downloading. If you disconnect during the update, it will continue the next time you're back online.

Add devices to Windows Vista (continued)

SET WINDOWS UPDATE TO CHECK FOR DRIVERS

After you set Windows to install and update drivers automatically, you can still check to see if there are new drivers or manually update your drivers with Windows Update if you wish.

Update drivers using Windows Update

1. Open Windows Update by clicking on the **Windows logo** in the bottom left corner of your display, click **All Programs**, then click **Windows Update**.
2. In the left pane, click **Check for updates**.
3. To see if updated drivers are available, click **View available updates**. Windows Update will list any updated drivers that are available for devices installed on your computer.
4. If updates are available, click the driver that you want to install, and then click **Install**.

You may be prompted for an administrator password, or to click **Continue** for confirmation.

Add devices to Windows Vista (continued)



Troubleshooting: still having problems?

If you're still having problems, try these three methods.

Manually update a driver

You must be logged on as an Administrator to do this.

1. Open Device Manager by clicking the **Start** button, clicking **Control Panel**, clicking **System and Maintenance**, and then clicking **Device Manager**. You may have to scroll down to see it.

You may be prompted for an administrator password, or to click Continue for confirmation.

2. In Device Manager, locate the device you want to update, then double-click the name of the device.
3. Click the **Driver** tab, then click **Update Driver**.

Check your device's compatibility with Windows Vista

The Windows Vista Hardware Compatibility Center is at <http://www.microsoft.com/windows/compatibility>. If your specific make and model is listed, it's been tested to work with Windows Vista.

Check with the manufacturer

If you are still having trouble getting your hardware to work properly, it may be time to check with the manufacturer. Try the following:

- If your hardware came with an installation CD or disk and you have not inserted it yet, do that now and follow the prompts to install.
- Check the manufacturer's Web site. They may have released an updated driver that you can download. Be sure to read any accompanying installation notes that may be included.
- Contact the manufacturer's support center for further instruction and troubleshooting advice.



If the manufacturer doesn't offer a Windows Vista driver for your device, try installing a Windows XP driver. In most cases, a Windows XP driver will be good enough to make your device function at a basic level; it just might not take advantage of all the new capabilities of Windows Vista.

Add devices to Windows Vista (continued)

More Information

- Windows Vista Help & How to—Finding drivers: <http://windowshelp.microsoft.com/Windows/en-US/help/64deec6d-7992-4ddc-86eb-398d30d6836d1033.mspx>
- Windows Vista Help & How to—Demo: find drivers for your hardware: <http://windowshelp.microsoft.com/Windows/en-US/help/e8a4ee88-9e6b-4f97-9748-212020aac3541033.mspx>

Add a printer

Let your Windows Vista PC guide you through printer setup quickly and easily, so you can start printing sooner.

ADD A NON-USB PRINTER

Before you connect a new printer to your PC, read and follow the manufacturer's instructions. In most cases, particularly USB printers, Windows Vista will automatically install the printer when it's plugged in and powered on. But if you're trying to install a printer that doesn't use a USB cable, if Windows Vista can't automatically install it, or if you've previously removed the printer and want to add it again, proceed with the following steps:

1. To add a printer, click the Windows logo in the bottom left corner of your display, click **Control Panel**, click **Hardware and Sound**, then click **Printers**.
2. Click **Add a printer**.
3. In the Add Printer Wizard, select **Add a local printer**.

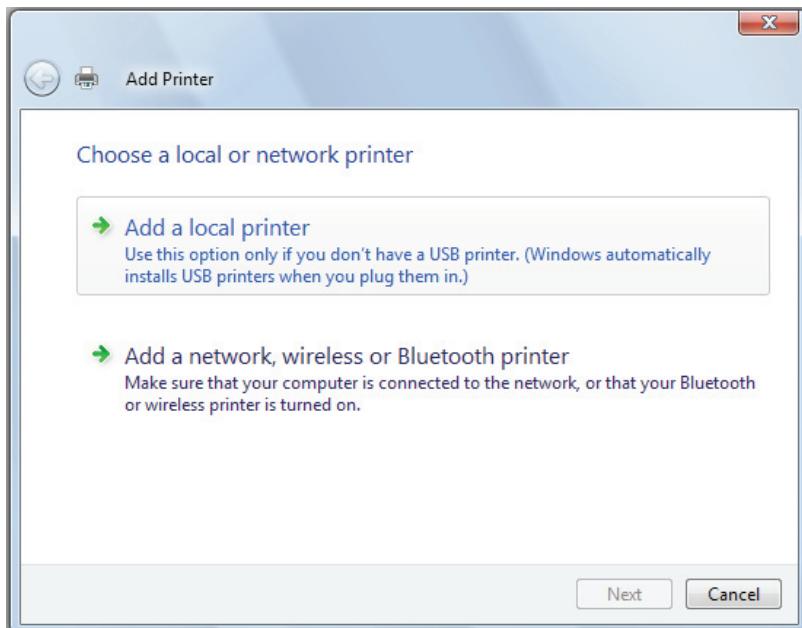


Figure 3—Add a printer here if it's not USB.

4. On the **Choose a printer port** page, make sure that the **Use an existing port** option button and the recommended printer port are selected, then click **Next**.

Add a Printer (continued)

5. On the **Install the printer driver** page, select the printer manufacturer and model, then click **Next**.
6. Complete the additional steps in the wizard, and then click **Finish**.



If your printer isn't listed, but you have the manufacturer's installation CD or DVD disk, click **Have disk** on the **Install a printer driver** dialog box (step 5 above) and insert the disk. Give the disk a few moments to load and then browse to it in the dialog box that pops up, select it and click **OK**. Then follow the prompts.

ADD A NETWORK, WIRELESS OR BLUETOOTH PRINTER

Before you begin, make sure you know the name of the printer that you want to add. Sometimes the name is displayed on the printer itself. If the name is not on the printer, contact the printer owner or your network administrator to find out the printer's name before following the steps below.

1. To add a network, wireless or Bluetooth printer, click the Windows logo in the bottom left corner of your display, click **Control Panel**, click **Hardware and Sound**, then click **Printers**.
2. Click **Add a printer**.
3. In the Add Printer wizard, select **Add a network, wireless or Bluetooth printer**.
4. In the list of available printers, select the one you want to use, and then click **Next**. If your computer is connected to a network, only printers listed in Active Directory for your domain are displayed in the list.

If prompted, install the printer driver on your computer. If you are prompted for an administrator password or confirmation, type the password or provide confirmation.

5. Complete the additional steps in the wizard, and then click **Finish**.



If you have successfully added a printer but it's not working or not working correctly, it's most likely because your printer driver isn't compatible with Windows Vista. Go back to the beginning of this Guide for instructions on how to turn on automatic updating and set Windows Update to check for drivers. If that doesn't solve the problem, keep going through the Troubleshooting section.

More Information

- Windows Vista Help & How to—Add or remove a printer: <http://windowshelp.microsoft.com/Windows/en-US/help/4097d784-4b1e-423d-b6be-737f81f7b1dc1033.mspx>

Add a Digital Camera or Video Camera

Windows Vista makes it quick and simple to get your photos and videos onto your PC so that you can start having fun with them.

ADD A CAMERA

The simplest method for adding a camera is to connect the camera's USB cable to your computer.

1. Connect the camera to your computer by using the camera's USB cable.
2. Turn on the camera.
3. A dialog box with import options should automatically appear. Choose the option you prefer.

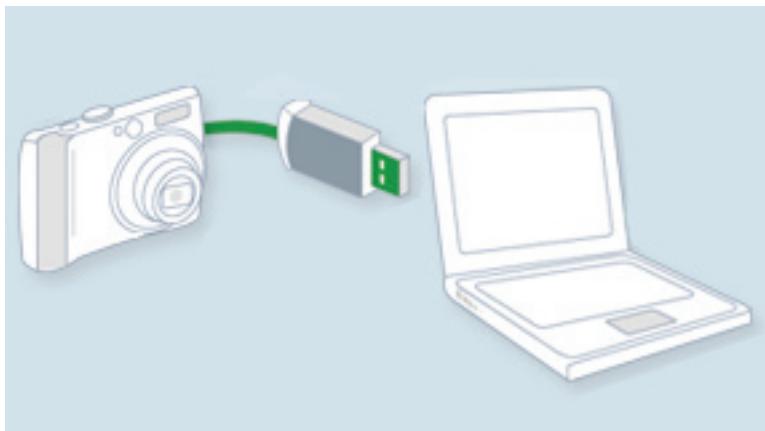


Figure 4—A camera connection with a USB cable.

Add a Digital Camera or Video Camera (continued)

ADD A VIDEO CAMERA

Types of video camera connections

There are two ways digital video cameras connect to PCs, and once you know which method your camera uses, importing video is a snap.

- A FireWire or iLink cable, sometimes also called "IEEE 1394," is the fastest method and can transfer very large files very quickly, and is usually found on higher-end cameras.
- A USB 2.0 cable, usually found on lower-end cameras, also widely available.

Connect your video camera

1. Make sure that the correct end of either the FireWire cable or USB 2.0 connector is plugged into the appropriate port on your digital video camera, often labeled DV Port or DV In/Out.
2. Plug the other end of the cable or connector into the appropriate port on your PC.
3. Switch the mode on your camera to the playback setting, often labeled as VCR or VTR.
4. A dialog box with import options should automatically appear. Choose the option you prefer.

More Information

- Windows Vista Help & How to—How do I get pictures from my camera to my computer?:
<http://windowshelp.microsoft.com/Windows/en-US/Help/f17ebfe2-19c5-4083-82d7-2e37cf2085651033.mspx>
- Windows Vista Help & How to—Which types of digital video cameras and connections can I use to import video?: <http://windowshelp.microsoft.com/Windows/en-US/Help/c1ecc18-0edf-4d5a-9c0e-f127add0f3751033.mspx>

Add a Game Controller

Windows Vista will automatically find and install the necessary drivers for most game controllers. If the device uses a USB cable, try turning on both the PC and the device and plug the game controller into a USB port. Windows should recognize the new hardware and set it up to work properly.

If that doesn't work, go back to the beginning of this Guide for instructions on how to turn on Automatic Updates and set Windows Update to check for drivers. If that doesn't solve the problem, keep going through the Troubleshooting section.

You might need to change the preferred game controller setting if a game you're trying to play does not recognize the controller you want to use.

1. Open Game Controllers by clicking the **Start** button, clicking **Control Panel**, clicking **Hardware**, clicking **Game Controllers**, and then clicking **Change the default game controller**.
2. In the list that appears, right-click the controller you want to use, and then click **Move to top**.

More Information

- Windows Live—Game controllers: <http://windowshelp.microsoft.com/Windows/en-US/Help/eddc2eca-7f0d-49b6-8345-568d751ff6ab1033.mspx>

Add an External Hard Drive

Installing a new hard disk is not only a great way to extend the life of a computer that is running out of storage space, it's easy to do.

ADD EXTERNAL HARD DISKS

To install an external hard disk, all you have to do is plug it in to your computer and connect the power cord. Most hard disks plug into a USB port, but some plug into a FireWire or iLink port (sometimes known as "IEEE 1394"). Be sure your computer has the right kind of port as the external hard disk to want to add.

For additional instructions, check the information that came with your external hard disk. You may also want to install any software that came with the hard disk.



An external hard disk cannot function as your primary hard disk where you install Windows, but you can use it as a secondary disk to store programs and files. This is a good way to create plenty of extra space to store digital photos, videos, music, and other files that require a large amount of disk space.

More Information

- Windows Vista Help & How to—Install or remove a hard disk: <http://windowshelp.microsoft.com/Windows/en-US/Help/cdfee224-2c9d-4102-9fbe-68e178310b281033.mspx>
- Windows Vista Help & How to—Managing hard disks: recommended links: <http://windowshelp.microsoft.com/Windows/en-US/Help/05a09890-9231-4ad0-b86a-1725e22ad57b1033.mspx>

Add another monitor

Adding a second monitor has never been easier. In fact, if your computer has the capability, it can be as simple as connecting and plugging a new monitor in.

To add a second monitor to your computer, you'll need to make sure that you either have a video card that supports multiple monitors, or that your computer has more than one video card. The easiest way to determine this is to look at the back of your computer and see if your card has two video ports for connecting your monitors.

Once you have verified that your video card can support a second monitor, follow these steps to add it:

1. Turn off your computer and monitor.
2. Locate the video ports on your computer.



3. Connect the second monitor to the unused video port.
4. Plug the second monitor into an electrical power source and turn it on.
5. Turn on your original monitor.
6. Turn on your computer.

Add another monitor (continued)

Windows should recognize the monitor automatically. If you are prompted to install driver software, see the instructions that came with the monitor.



You can also check your video card manufacturer's Web site to determine if the card supports multiple monitors. Some video cards include a special cable that splits a single connector into two. If your card supports such a splitter, it might be in the box your card came in.

More Information

- Windows Vista Help & How to—Add a second monitor: <http://windowshelp.microsoft.com/Windows/en-US/help/32edd0db-c229-462a-a670-1fe249afc0ef1033.mspx>



SITES MENTIONED IN THIS GUIDE

Windows Vista: <http://www.microsoft.com/windows/products/windowsvista/default.aspx>

Windows Marketplace: <http://www.windowsmarketplace.com/>

Windows Vista Hardware Compatibility Center: <http://www.microsoft.com/windows/compatibility/>

Windows Vista Help & How to: <http://windowshelp.microsoft.com/Windows/en-US/default.mspx>

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