studio hybrid

SETUP GUIDE

DELL™

YOURS IS HERE

Your Studio Hybrid was designed with the environment in mind.

Learn more at www.dell.com/hybrid.

Studio Hybrid

SETUP GUIDE

Model DCSEA

Notes, Notices, and Cautions

 NOTE: A NOTE indicates important information that helps you make better use of your computer.

 NOTICE: A NOTICE indicates either potential damage to hardware or loss of data and tells you how to avoid the problem.

 CAUTION: A CAUTION indicates a potential for property damage, personal injury, or death.

If you purchased a Dell™ n Series computer, any references in this document to Microsoft® Windows® operating systems are not applicable.

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Setting Up Your Studio Hybrid

This section provides information about setting up your Studio Hybrid 140g and connecting peripherals.

Before Setting Up Your Computer

When positioning your computer, ensure that you allow easy access to a power source, adequate ventilation, and a level surface to place your computer.

Restricting airflow around your Studio Hybrid may cause it to overheat. To prevent overheating ensure that you leave at least 10.2 cm (4 in) at the back of the computer and a minimum of 5.1 cm (2 in) on all other sides. You should never put your computer in an enclosed space, such as a cabinet or drawer when it is powered on.

NOTICE: Placing or stacking heavy or sharp objects on the computer may result in permanent damage to the computer.

Install the Stand

You have the option of setting up your computer either in a vertical or horizontal position.
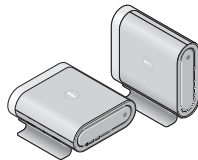
Your computer automatically rotates the illuminated name and symbols to display correctly in either orientation. While powered on, the Dell™ logos on either side of the computer illuminate when the computer is vertical, and only on the top surface when it is horizontal.

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Vertical Position

To set up your computer in a *vertical* position, align the securing tabs on the stand with the slots on the computer. Lower the computer onto the stand until the tabs have fully inserted into the slots.
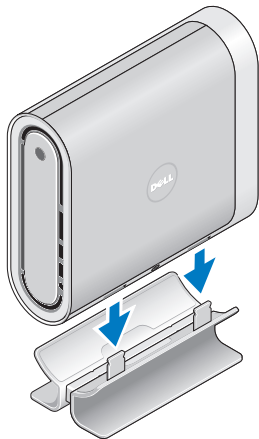
Horizontal Position

To set up your computer in a *horizontal* position:

1. If the stand has been installed in the vertical position, gently lift the computer away from the stand while holding the stand down on a level surface.

2. Turn the stand over and push the stabilizer bar away from the stand.
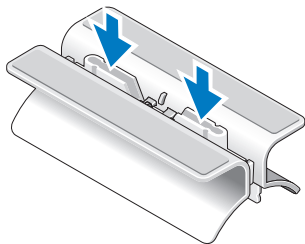
3. Separate the two ends of the stand.

5. Align the securing tabs on the stand with the slots on the computer and lower the computer onto the stand until the securing tabs are inserted into the slots.

4. Turn the stand over and align the stabilizer bar with the securing slots on the stand.
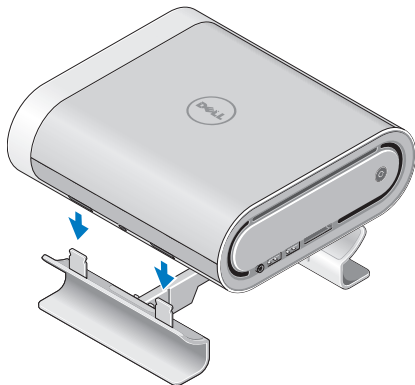
Connect the Display

Your computer uses one of two different connectors for the display. The HDMI connector is a high performance digital connector that carries both video and audio signals for displays such as TVs and monitors with integrated speakers. The DVI connector is also a high performance digital 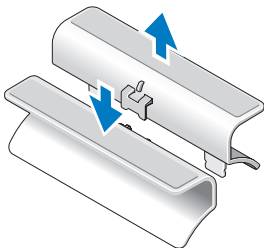connector, but it does not carry an audio signal. This connector can be used for displays such as monitors and projectors that do not have speakers.

Check your TV or monitor to see which type of connectors are available. Refer to the following table when identifying the connectors on your display to select the connection type you will use.

DVI	⏻	◎ ▦▦▦ ─ ◎
HDMI	HDMI	▭▭▭
VGA	▯▯▯	◎ ▦▦▦ ◎
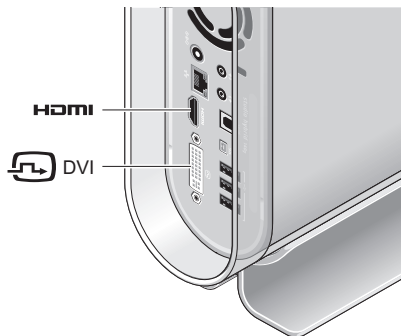
Connect the display using ONLY ONE of the following connectors: the white DVI connector or the HDMI connector.

NOTE: The HDMI will not have a display signal if both a DVI and an HDMI cables are connected because the DVI connector has priority over the HDMI connector.

Connect Using the DVI Connector

Connect the display using a DVI cable (which usually has white connectors at both ends).
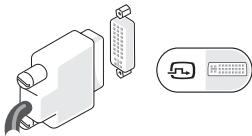
If your display already has a VGA cable (with blue connectors at both ends) connected to your display, disconnect the VGA cable and use a DVI cable.

If your display only has a VGA connector, use a VGA cable with the VGA-to-DVI adapter (not included with your computer).
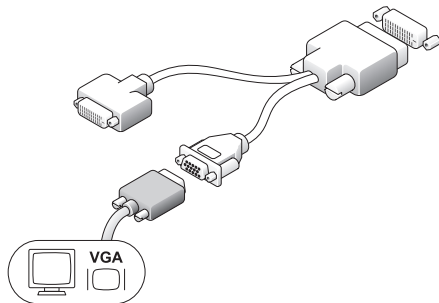
Connect Using an HDMI Connector

Connect the display using an HDMI cable.

NOTE: You can purchase additional VGA-to-DVI adapters, as well as DVI and HDMI cables from the Dell website at **dell.com**.

Set Up the Keyboard and Mouse

Wireless Keyboard and Mouse

If your computer was purchased with a wireless keyboard and mouse:

1. Insert the batteries in the wireless keyboard and mouse.

   NOTE: The keyboard and mouse turn on automatically after the batteries are inserted.
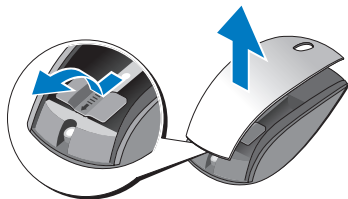
2. Press any key on the keyboard and click the mouse after your computer starts up.

USB Keyboard and Mouse

If your computer was not purchased with a wireless keyboard and mouse, use the USB connections on the back panel of the computer.

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Connect the Network Cable (Optional)

A network connection is not required to complete this computer setup, but if you have an existing network or Internet connection that uses a cable connection (such as a home cable modem, or Ethernet jack), you can connect it now.
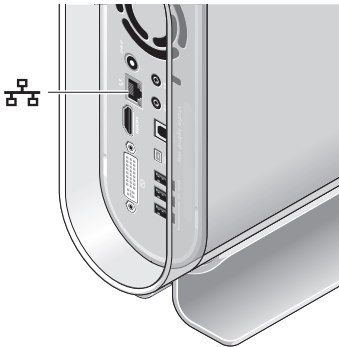
Use only an Ethernet cable (RJ - 45 connector). Do not plug a telephone cable (RJ-11 connector) into the network connector.

To attach your computer to a network or broadband device, connect one end of a network cable to either a network port or a broadband device. Connect the other end of the network cable to the network adapter connector on the back panel of your computer. A click indicates that the network cable has been securely attached.

Connect the Power Cables for Your Display and Computer
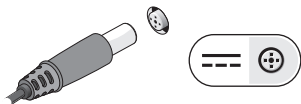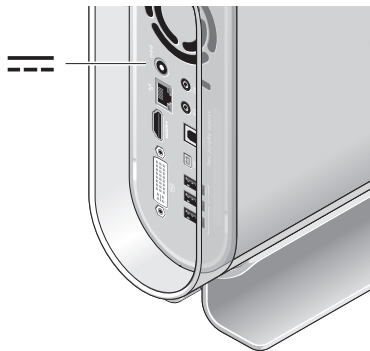
Attach the Cable Clip (Optional)

Organize your computer cables by fixing the clip over the cables.

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Press the Power Buttons on Your Computer and Display

Windows Vista® Setup

Your Dell computer is preconfigured with Windows Vista. To set up Windows Vista for the first time, follow the instructions on the screen. These steps are mandatory and may take up to 15 minutes to complete. The screens will take you through several procedures including accepting license agreements, setting preferences and setting up an Internet connection.

○ **NOTICE:** Do not interrupt the operating system's setup process. Doing so may render your computer unusable.

Connect to the Internet (Optional)

✎ **NOTE:** ISPs and ISP offerings vary by country.

To connect to the Internet, you need an external modem or network connection and an Internet service provider (ISP). Your ISP will offer one or more of the following Internet connection options:

• DSL connections that provide high-speed Internet access through your existing telephone line or cellular telephone service. With a DSL connection, you can access the Internet and use your telephone on the same line simultaneously.

• Cable modem connections that provide high-speed Internet access through your local cable TV line.

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- Satellite modem connections that provide high-speed Internet access through a satellite television system.

- Dial-up connections that provide Internet access through a telephone line. Dial-up connections are considerably slower than DSL and cable (or satellite) modem connections. Your computer does not have an integrated modem. An optional USB modem must be used for dialup service with this computer.

- Wireless LAN connections that provide Internet access using WiFi 802.11 technology. Wireless LAN support requires optional internal components that may or may not be installed in your computer based on decisions made at the time of purchase.

NOTE: If an external USB modem or WLAN adapter is not part of your original order you can purchase one from the Dell website at **dell.com**.

Setting Up a Wired Internet Connection

If you are using a dial-up connection, connect the telephone line to the external USB modem (optional) and to the telephone wall jack before you set up your Internet connection. If you are using a DSL or cable/satellite modem connection, contact your ISP or cellular telephone service for setup instructions.

Setting Up a Wireless Connection

Before you can use your wireless Internet connection, you need to connect to your wireless router. To set up your connection to a wireless router:

1. Save and close any open files, and exit any open programs.

2. Click **Start** → **Connect To**.

3. Follow the instructions on the screen to complete the setup.

Setting Up Your Internet Connection

To set up an Internet connection with a provided ISP desktop shortcut:

1. Save and close any open files, and exit any open programs.

2. Double-click the ISP icon on the Microsoft® Windows® desktop.

3. Follow the instructions on the screen to complete the setup.

If you do not have an ISP icon on your desktop or if you want to set up an Internet connection with a different ISP, perform the steps in the following section.

NOTE: If you cannot connect to the Internet but have successfully connected in the past, the ISP might have a service outage. Contact your ISP to check the service status, or try connecting again later.

NOTE: Have your ISP information ready. If you do not have an ISP, the Connect to the Internet wizard can help you get one.

1. Save and close any open files, and exit any open programs.

2. Click **Start** → **Control Panel**.

3. Under **Network and Internet**, click **Connect to the Internet**.

   The **Connect to the Internet** window appears.

4. Click either **Broadband (PPPoE)** or **Dial-up**, depending on how you want to connect:

   a. Choose **Broadband** if you will use a DSL, satellite modem, cable TV modem, or Bluetooth® wireless technology connection.

   b. Chose **Dial-up** if you will use an optional USB dial-up modem or ISDN.

NOTE: If you do not know which type of connection to select, click **Help me choose** or contact your ISP.

5. Follow the instructions on the screen and use the setup information provided by your ISP to complete the setup.

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
studio

Using Your Studio Hybrid

Your Studio Hybrid 140g has indicators, buttons, and features that provide information at-a-glance and time-saving shortcuts for common tasks.

Front View Features

1 ⏻ **Power button and light —** Turns the power on or off when pressed. The light in the center of this button indicates the power state:

- Blinking white — the computer is in sleep state.
- Solid white — the computer is in power-on state.
- Blinking amber — there may be a problem with the system board.
- Solid amber — the system board cannot start initialization. There may be an issue with either the system board or power supply.

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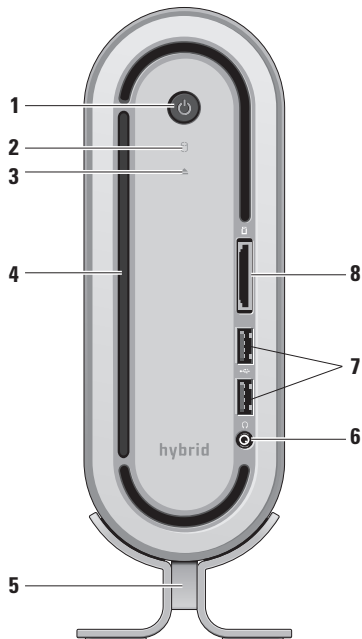
2 ⬛ **Hard drive activity light** — Turns on when the computer reads or writes data. A flashing light indicates hard drive activity.

> ● **NOTICE:** To avoid loss of data, never turn off the computer while the hard drive activity light is flashing.

3 ⏏ **Disc drive eject control** — Lights up when the computer starts up and when a disc is in the drive. To eject a disc gently touch the button.

4 Optical drive — Plays or records only standard-size (12 cm) CDs, and DVDs. See "Using the Optical Disc Drive" on page 20.

5 Computer stand — Provides stability for the computer and can be reconfigured to hold the computer in a vertical or a horizontal orientation. For more information see "Install the Stand" on page 5.

6 🎧 **Headphone connector** — Connects to headphones. For audio to a powered speaker or sound system, use the **audio out** or **S/PDIF** connector on the back.

7 ⇌ **USB 2.0 connectors (2)** — Connects USB devices that are connected occasionally, such as memory keys, digital cameras, and MP3 players.

8 ▮ **Media card reader** — Provides a fast and convenient way to view and share digital photos, music, videos, and documents stored on the following digital memory cards:
  • Secure digital (SD) memory card
  • SDHC (Secure Digital High Capacity) card
  • Multi Media Card (MMC)
  • Memory Stick
  • Memory Stick PRO
  • xD-Picture Card (type - M and type - H)

Back View Features

1 $\boxed{(\!(\!\textcircled{O}\!)\!)}$ **Wireless sync button** — A wireless connection can be established between your keyboard and mouse and your computer. Press the sync button on the back of your computer, then press the sync button on the device that you wish to use.

2 $\boxed{\ominus\!\!-\!\!\circ\!\!-\!\!\oplus}$ **Power connector** — Connects your computer to the AC adapter.

3 $\boxed{\frac{\Box}{\overline{\text{a}\text{a}}}}$ **Network connector and light** — Connects your computer to a network or broadband device. The network activity light flashes when the computer is transmitting or receiving data. A high volume of network traffic may make this light appear to be in a steady "on" state.

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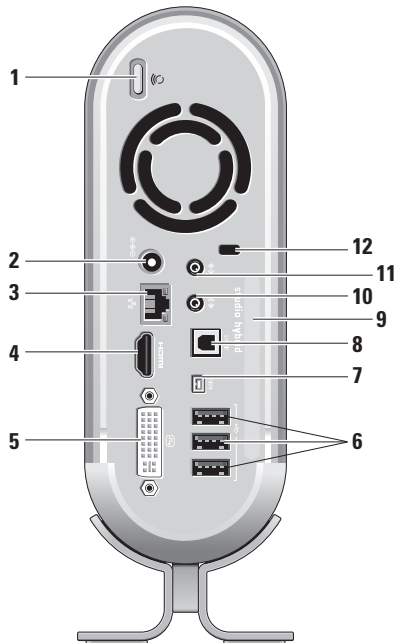
4 HDMI **HDMI 1.2 connector** — Connects to a TV for both audio and video signals.

> **NOTE:** For a monitor without built-in speakers, only the video signal will be read.

5 DVI-I **DVI-I connector** — Connects to a monitor or projector using a DVI-D cable.

6 USB **USB 2.0 connectors (3)** — Connects USB devices, such as a mouse, keyboard, printer, external drive, or MP3 player.

7 1394 **IEEE 1394 connector** — Connects to high-speed serial multimedia devices, such as digital video cameras.

8 S/PDIF connector — Connects to amplifiers and TVs for digital audio through optical digital cables. This format carries an audio signal without going through an analog audio conversion process.

9 Computer name and Express Service Code — Used to identify your computer for use on **support.dell.com** or when contacting technical support.

10 Line-out or headphone connector — Connects to headphones or sends audio to a powered speaker or sound system.

11 Line-in or microphone connector — Connects to a microphone for voice or to an audio cable for musical input.

12 Security cable slot — Connects to a lock for a security cable used as an anti-theft device.

> **NOTE:** Before you buy a lock, ensure that it works with the security cable slot on your computer.

Using the Optical Disc Drive

🔵 **NOTICE:** Do not use non-standard-size or shape discs (including mini-CDs and mini-DVDs) or you will damage the drive.

12 cm
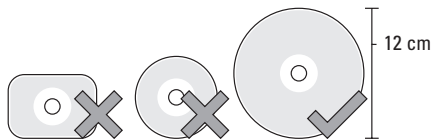
📝 **NOTE:** Do not move the computer while playing or recording CDs and DVDs.

Place the disc in the center of the disc slot, with the label facing outwards and gently push the disc into the slot. The drive will automatically pull the disc in and begin reading its content.

⏏ To eject a disc from the drive, gently touch the eject control. The control will flash to confirm a few seconds before ejecting the disc.

Changing the Sleeve

You can use different sleeves to personalize your computer's appearance.

✏️ **NOTE:** You can purchase additional sleeves from the Dell website at **dell.com**.

To change your computer's sleeve:

1. Place the computer horizontally on a clean flat surface such as a mat to avoid scratches and remove the screw.

2. Place the computer vertically and pull the sleeve gently towards the back of your computer, then gently slide the new sleeve onto the computer.
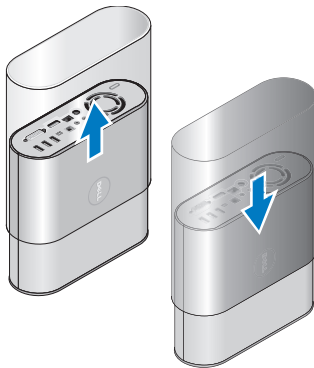
3. Place the computer horizontally again and replace the screw by inserting it at an approximately 45-degree angle and gently turning the screw.

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Software Features

📝 **NOTE:** For more information about the features described in this section, see the *Dell Technology Guide* on your hard drive or on the Dell Support website at **support.dell.com**.

Productivity and Communication

You can use your computer to create presentations, brochures, greeting cards, fliers, and spreadsheets. You can also edit and view digital photographs and images. Check your purchase order for software installed on your computer.

After connecting to the Internet, you can access websites, setup an e-mail account, upload and download files, and so on.

Entertainment and Multimedia

You can use your computer to watch videos, play games, create your own CDs, listen to music and radio stations. Your optical disc drive may supports multiple disc media formats including CDs, Blu-ray discs (if the option is selected at the time of purchase), and DVDs.

You can download or copy pictures and video files from portable devices, such as digital cameras and cell phones. Optional software applications enable you to organize and create music and video files that can be recorded to disc, saved on portable products such as MP3 players and handheld entertainment devices, or played and viewed directly on connected TVs, projectors, and home theater equipment.

Customizing the Desktop

You can customize your desktop to change the appearance, resolution, wallpaper, screensaver, and so on by accessing the **Personalize appearance and sounds** window.

To access the display properties window:

1. Right-click an open area of the desktop.

2. Click **Personalize**, to open the **Personalize appearance and sounds** window and learn more about your customization options.

Customizing Your Energy Settings

You can use the power options in your operating system to configure the power settings on your computer. Microsoft® Windows Vista® provides three default options:

- **Balanced** — This power option offers full performance when you need it and saves power during periods of inactivity.

- **Power saver** — This power option saves power on your computer by reducing system performance to maximize the life of the computer and by reducing the amount of energy consumed by your computer over its lifetime.

- **High performance** — This power option provides the highest level of system performance on your computer by adapting processor speed to your activity and by maximizing system performance.

Backing Up Your Data

It is recommended that you periodically back up files and folders on your computer. To back up files:

1. Click **Start** → **Control Panel**→ **System and Maintenance**→ **Welcome Center**→ **Transfer files and settings**.

2. Click **Back up files** or **Back up computer**.

3. Click **Continue on Your User Account Control** dialog box and follow the instructions in the Back up Files wizard.

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Solving Problems

This section provides troubleshooting information for your computer. If you can not solve your problem using the following guidelines, see "Using Support Tools" on page 30 or "Contacting Dell" on page 45.

⚠ **CAUTION: Only trained service personnel should remove the computer cover. See the *Service Manual* on the Dell Support website at support.dell.com for advanced service and troubleshooting instructions.**

Wireless Mouse or Keyboard Problems

If the mouse and keyboard stop communicating with the computer — The batteries may not be working or the keyboard and mouse have lost their connection with the computer.

• Check the batteries in the keyboard and mouse to ensure that they have enough power and are installed correctly.

• Reestablish a connection with the computer:

a. Turn on the computer.
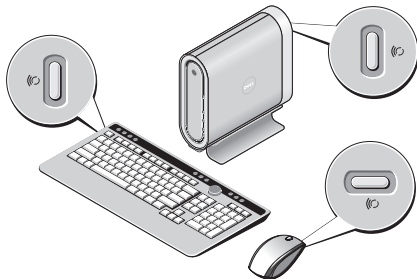
b. Press the wireless sync button at the back of your computer and then the wireless sync button on your keyboard.

c. Press the wireless sync button on the computer again, and then the wireless sync button on your mouse. The mouse and keyboard should now be paired.

Network Problems

Wireless Connections

If the network connection is lost — The wireless router is offline or wireless has been disabled on the computer.

- Check your wireless router to ensure it is powered on and connected to your data source (cable modem or network hub).

- Re-establish your connection to the wireless router:

  a. Save and close any open files, and exit any open programs.

  b. Click **Start** → **Connect To**.

  c. Follow the instructions on the screen to complete the setup.

Wired Connections

If the network connection is lost — The cable is loose or damaged.

- Check the cable to ensure it is plugged in and not damaged.

The link integrity light on the integrated network connector lets you verify that your connection is working and provides information on the status:

- Green — A good connection exists between a 10-Mbps network and the computer.

- Orange — A good connection exists between a 100-Mbps network and the computer.

- Yellow — A good connection exists between a 1000-Mbps network and the computer.

- Off — The computer is not detecting a physical connection to the network.

NOTE: The link integrity light on the network connector is only for the wired cable connection. The link integrity light does not provide status for wireless connections.

Power Problems

If the power light is off — The computer is either turned off or is not receiving power.

- Reseat the power cable into both the power connector on the computer and the electrical outlet.

- If the computer is plugged into a power strip, ensure that the power strip is plugged into an electrical outlet and that the power strip is turned on. Also bypass power protection devices, power strips, and power extension cables to verify that the computer turns on properly.

- Ensure that the electrical outlet is working by testing it with another device, such as a lamp.

- Check the AC adapter cable connections. If the AC adapter has a light, ensure that the light on the AC adapter is on.

If the power light is solid white and the computer is not responding — The display may not be connected or powered on. Ensure that the display is properly connected and then turn it off then back on.

If the power light is blinking white — The computer is in standby mode. Press a key on the keyboard, move the pointer on the trackpad or a connected mouse, or press the power button to resume normal operation.

If the power light is solid amber — The computer has a power problem or an internal device malfunction. For assistance contact Dell, see "Contacting Dell" on page 45.

If the power light is blinking amber — The computer is receiving electrical power, but a device might be malfunctioning or incorrectly installed. You may have to remove and then reinstall the memory modules (for information on removing and replacing memory modules, see the *Service Manual* on the Dell Support website at **support.dell.com**).

If you encounter interference that hinders reception on your computer — An unwanted signal is creating interference by interrupting or blocking other signals. Some possible causes of interference are:

- Power, keyboard, and mouse extension cables.
- Too many devices connected to a power strip.
- Multiple power strips connected to the same electrical outlet.

Memory Problems

If you receive an insufficient memory message—

- Save and close any open files and exit any open programs you are not using to see if that resolves the problem.
- See the software documentation for minimum memory requirements. If necessary, install additional memory (See the *Service Manual* on the Dell Support website at **support.dell.com**).

- Reseat the memory modules (See the *Service Manual* on the Dell Support website at **support.dell.com**) to ensure that your computer is successfully communicating with the memory.

If you experience other memory problems —

- Ensure that you are following the memory installation guidelines (see the *Service Manual* on the Dell Support website at **support.dell.com**).
- Check if the memory module is compatible with your computer. Your computer supports DDR2 memory. For more information about the type of memory supported by your computer, see "Basic Specifications" on page 48.
- Run the Dell Diagnostics (see "Dell Diagnostics" on page 32).
- Reseat the memory modules (see the *Service Manual* on the Dell Support website at **support. dell.com**) to ensure that your computer is successfully communicating with the memory.

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Lockups and Software Problems

If the computer does not start up — Ensure that the power cable is firmly connected to the computer and to the electrical outlet.

If a program stops responding — End the program:

1. Press <Ctrl><Shift><Esc> simultaneously.

2. Click **Applications**.

3. Click the program that is no longer responding

4. Click **End Task**.

If a program crashes repeatedly — Check the software documentation. If necessary, uninstall and then reinstall the program.

✍ **NOTE:** Software usually includes installation instructions in its documentation or on CD.

If the computer stops responding —

⊘ **NOTICE:** You might lose data if you are unable to perform an operating system shutdown.

Turn the computer off. If you are unable to get a response by pressing a key on your keyboard or moving your mouse, press and hold the power button for at least 8 to 10 seconds until the computer turns off. Then restart your computer.

If a program is designed for an earlier Microsoft® Windows® operating system —

Run the Program Compatibility Wizard. The Program Compatibility Wizard configures a program so that it runs in an environment similar to non-Windows Vista operating system environments.

1. Click **Start** → **Control Panel**→ **Programs**→ **Use an older program with this version of Windows**.

2. In the welcome screen, click **Next**.

3. Follow the instructions on the screen.

If a solid blue screen appears — Turn the computer off. If you are unable to get a response by pressing a key on your keyboard or moving your pointer or mouse, press and hold the power button for at least 8 to 10 seconds until the computer turns off. Then restart your computer.

If you have other software problems —

- Back up your files immediately.
- Use a virus-scanning program to check the hard drive or CDs.
- Save and close any open files or programs and shut down your computer through the **Start** menu.
- Check the software documentation or contact the software manufacturer for troubleshooting information:
  - Ensure that the program is compatible with the operating system installed on your computer.

- Ensure that your computer meets the minimum hardware requirements needed to run the software. See the software documentation for information.
- Ensure that the program is installed and configured properly.
- Verify that the device drivers do not conflict with the program.
- If necessary, uninstall and then reinstall the program.

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Using Support Tools

Dell Support Center

The Dell Support Center helps you find the service, support, and system-specific information you need. For more information about Dell Support Center and available support tools, click the **Services** tab at **support.dell.com**.

Click the ⚲ icon in the taskbar to run the application. The home page provides links to access:

- Self Help (Troubleshooting, Security, System Performance, Network/Internet, Backup/Recovery, and Windows Vista)
- Alerts (technical support alerts relevant to your computer)
- Assistance from Dell (Technical Support with DellConnect™, Customer Service, Training

and Tutorials, How-To Help with Dell on Call, and Online Scan with PCCheckUp)

- About Your System (System Documentation, Warranty Information, System Information, Upgrades & Accessories)

The top of the Dell Support Center home page displays your system's model number along with its service tag and express service code.

For more information about the Dell Support Center, see the *Dell Technology Guide* on your hard drive or on the Dell Support website at **support.dell.com**.

System Messages

If your computer has an issue or error, it may display a System Message that will help you identify the cause and action needed to resolve the issue.

NOTE: If the message you received is not listed in the following examples, see the documentation for either the operating system or the program that was running when the message appeared. Alternatively you could see the *Service Manual* on the Dell Support website at **support.dell.com** or see "Contacting Dell" on page 45 for assistance.

Alert! Previous attempts at booting this system have failed at checkpoint [nnnn]. For help in resolving this problem, please note this checkpoint and contact Dell Technical Support — The computer failed to complete the boot routine three consecutive times for the same error see "Contacting Dell" on page 45 for assistance.

CMOS checksum error — Possible motherboard failure or RTC battery low. Replace the battery. See the *Service Manual* on the Dell Support website at **support.dell.com** or see "Contacting Dell" on page 45 for assistance.

CPU fan failure — CPU fan has failed. Replace the CPU fan. See the *Service Manual* on the Dell Support website at **support.dell.com**.

Hard-disk drive failure — Possible hard disk drive failure during HDD POST see "Contacting Dell" on page 45 for assistance.

Hard-disk drive read failure — Possible hard disk drive failure during HDD boot test see "Contacting Dell" on page 45 for assistance.

Keyboard failure — Keyboard failure, loose cable, or lost wireless connection. For wireless keyboard connections, see "Wireless Mouse or Keyboard Problems" on page 24.

No boot device available — No bootable partition on hard disk drive, the hard disk drive cable is loose, or no bootable device exists.

• If the hard drive is your boot device, ensure that the cables are connected and that the drive is installed properly and partitioned as a boot device.

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• Enter system setup and ensure that the boot sequence information is correct (see the *Service Manual* on the Dell Support website at **support.dell.com**).

No timer tick interrupt — A chip on the system board might be malfunctioning or motherboard failure (see the *Service Manual* on the Dell Support website at **support.dell.com**).

USB over current error — Disconnect the USB device. Your USB device needs more power for it to function properly. Use an external power source to connect the USB device, or if your device has two USB cables, connect both of them.

NOTICE - Hard Drive SELF MONITORING SYSTEM has reported that a parameter has exceeded its normal operating range. Dell recommends that you back up your data regularly. A parameter out of range may or may not indicate a potential hard drive problem — S.M.A.R.T error, possible hard disk drive failure. This feature can be enabled or disabled in the

BIOS setup (see "Contacting Dell" on page 45 for assistance).

Hardware Troubleshooter

If a device is either not detected during the operating system setup or is detected but incorrectly configured, you can use the **Hardware Troubleshooter** to resolve the incompatibility.

To start the Hardware Troubleshooter:

1. Click **Start** → **Help and Support**.

2. Type hardware troubleshooter in the search field and press <Enter> to start the search.

3. In the search results, select the option that best describes the problem and follow the remaining troubleshooting steps.

Dell Diagnostics

If you experience a problem with your computer, perform the checks in "Lockups and Software Problems" on page 48 and run the Dell Diagnostics before you contact Dell for technical assistance.

It is recommended that you print these procedures before you begin.

⊘ **NOTICE:** Dell Diagnostics works only on Dell computers.

⃠ **NOTE:** The *Drivers and Utilities* media is optional and may not ship with your computer.

See the System Setup section in the *Service Manual* to review your computer's configuration information, and ensure that the device that you want to test displays in the system setup program and is active.

Start the Dell Diagnostics from your hard drive or from the *Drivers and Utilities* media.

Starting Dell Diagnostics From Your Hard Drive

The Dell Diagnostics is located on a hidden diagnostic utility partition on your hard drive.

⃠ **NOTE:** If your computer cannot display a screen image, see "Contacting Dell" on page 45.

1. Ensure that the computer is connected to an electrical outlet that is known to be working properly.

2. Turn on (or restart) your computer.

3. When the DELL™ logo appears, press <F12> immediately. Select **Diagnostics** from the boot menu and press <Enter>.

⃠ **NOTE:** If you wait too long and the operating system logo appears, continue to wait until you see the Microsoft® Windows® desktop; then, shut down your computer and try again.

⃠ **NOTE:** If you see a message stating that no diagnostics utility partition has been found, run the Dell Diagnostics from the *Drivers and Utilities* media.

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4. Press any key to start the Dell Diagnostics from the diagnostics utility partition on your hard drive.

Starting Dell Diagnostics From the Drivers and Utilities Media

1. Insert the *Drivers and Utilities* media.

2. Shut down and restart the computer. When the DELL logo appears, press <F12> immediately.

✎ **NOTE:** If you wait too long and the operating system logo appears, continue to wait until you see the Microsoft® Windows® desktop; then, shut down your computer and try again.

✎ **NOTE:** The next steps change the boot sequence for one time only. On the next start-up, the computer boots according to the devices specified in the system setup program.

3. When the boot device list appears, highlight **CD/DVD/CD-RW** and press <Enter>.

4. Select the **Boot from CD-ROM** option from the menu that appears and press <Enter>.

5. Type 1 to start the CD menu and press <Enter> to proceed.

6. Select **Run the 32 Bit Dell Diagnostics** from the numbered list. If multiple versions are listed, select the version appropriate for your computer.

7. When the Dell Diagnostics **Main Menu** appears, select the test you want to run.

System Recovery Options

You can restore your operating system in the following ways:

- System Restore returns your computer to an earlier operating state without affecting data files. Use System Restore as the first solution for restoring your operating system and preserving data files.

- Dell Factory Image Restore returns your hard drive to the operating state it was in when you purchased the computer. Both procedures permanently delete all data on the hard drive and remove any programs installed after you received the computer. Use Dell Factory Image Restore only if System Restore did not resolve your operating system problem.

- If you received an Operating System disc with your computer, you can use it to restore your operating system. However, using the

Operating System disc also deletes all data on the hard drive. Use the disc only if System Restore did not resolve your operating system problem.

System Restore

The Windows operating systems provide a System Restore option which allows you to return your computer to an earlier operating state (without affecting data files) if changes to the hardware, software, or other system settings have left the computer in an undesirable operating state. Any changes that System Restore makes to your computer are completely reversible.

- **NOTICE:** Make regular backups of your data files. System Restore does not monitor your data files or recover them.

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✏ **NOTE:** The procedures in this document were written for the Windows default view, so they may not apply if you set your Dell™ computer to the Windows Classic view.

Starting System Restore

1. Click **Start** *.

2. In the **Start Search** box, type System Restore and press <Enter>.

✏ **NOTE:** The **User Account Control** window may appear. If you are an administrator on the computer, click **Continue**; otherwise, contact your administrator to continue the desired action.

3. Click **Next** and follow the remaining prompts on the screen.

In the event that System Restore did not resolve the issue, you may undo the last system restore.

Undoing the Last System Restore

✏ **NOTE:** Before you undo the last system restore, save and close all open files and exit any open programs. Do not alter, open,

or delete any files or programs until the system restoration is complete.

1. Click **Start** *.

2. In the **Start Search** box, type System Restore and press <Enter>.

3. Click **Undo my last restoration** and click **Next**.

Dell Factory Image Restore

◯ **NOTICE:** Using Dell Factory Image Restore permanently deletes all data on the hard drive and removes any programs or drivers installed after you received your computer. If possible, back up the data before using these options. Use Dell Factory Image Restore only if System Restore did not resolve your operating system problem.

✏ **NOTE:** Dell Factory Image Restore may not be available in certain countries or on certain computers.

Use Dell Factory Image Restore only as the last method to restore your operating system.

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These options restore your hard drive to the operating state it was in when you purchased the computer. Any programs or files added since you received your computer—including data files—are permanently deleted from the hard drive. Data files include documents, spreadsheets, e-mail messages, digital photos, music files, and so on. If possible, back up all data before using Factory Image Restore.

Dell Factory Image Restore

1. Turn on the computer. When the Dell logo appears, press <F8> several times to access the **Vista Advanced Boot Options** Window.

2. Select **Repair Your Computer**.

3. The **System Recovery Options** window appears.

4. Select a keyboard layout and click **Next**.

5. To access the recovery options, log on as a local user. To access the command prompt, type administrator in the **User name** field, then click **OK**.

6. Click **Dell Factory Image Restore**. The **Dell Factory Image Restore** welcome screen appears.

   NOTE: Depending upon your configuration, you may need to select **Dell Factory Tools**, then **Dell Factory Image Restore**.

7. Click **Next**. The **Confirm Data Deletion** screen appears.

   NOTICE: If you do not want to proceed with Factory Image Restore, click **Cancel**.

8. Click the checkbox to confirm that you want to continue reformatting the hard drive and restoring the system software to the factory condition, then click **Next**.

   The restore process begins and may take five or more minutes to complete. A message appears when the operating system and factory-installed applications have been restored to factory condition.

9. Click **Finish** to reboot the system.

Operating System Reinstallation

Before you Begin

If you are considering reinstalling the Windows operating system to correct a problem with a newly installed driver, first try using Windows Device Driver Rollback. If Device Driver Rollback does not resolve the problem, then use System Restore to return your operating system to the operating state it was in before you installed the new device driver. See "Using Microsoft Windows System Restore" on page 35.

NOTICE: Before performing the installation, back up all data files on your primary hard drive. For conventional hard drive configurations, the primary hard drive is the first drive detected by the computer.

To reinstall Windows, you need the following items:

- *Dell Operating System* media
- *Dell Drivers and Utilities* media

NOTE: The *Dell Drivers and Utilities* media contains drivers that were installed during the assembly of the computer. Use the Dell Drivers and Utilities media to load any required drivers. Depending on the region from which you ordered your computer, or whether you requested the media, the *Dell Drivers and Utilities* media and *Operating System* media may not ship with your computer.

Reinstalling Windows Vista

The reinstallation process can take 1 to 2 hours to complete. After you reinstall the operating system, you must also reinstall the device drivers, virus protection program, and other software.

1. Save and close any open files and exit any open programs.

2. Insert the *Operating System* disc.

3. Click **Exit** if the **Install Windows** message appears.

4. Restart the computer.

5. When the DELL logo appears, press <F12> immediately.

 NOTE: If you wait too long and the operating system logo appears, continue to wait until you see the Microsoft® Windows® desktop; then, shut down your computer and try again.

 NOTE: The next steps change the boot sequence for one time only. On the next start-up, the computer boots according to the devices specified in the system setup program.

6. When the boot device list appears, highlight **CD/DVD/CD-RW Drive** and press <Enter>.

7. Press any key to **Boot from CD-ROM**. Follow the instructions on the screen to complete the installation.

studio

Getting Help

If you experience a problem with your computer, you can complete the following steps to diagnose and troubleshoot the problem:

1. See "Solving Problems" on page 24 for information and procedures that pertain to the problem your computer is experiencing.

2. See "Dell Diagnostics" on page 32 for procedures on how to run Dell Diagnostics.

3. Fill out the "Diagnostic Checklist" on page 44.

4. Use Dell's extensive suite of online services available at Dell Support (**support.dell.com**) for help with installation and troubleshooting procedures. See "Online Services" on page 41 for a more extensive list of Dell Support online.

5. If the preceding steps have not resolved the problem, see "Contacting Dell" on page 45.

NOTE: Call Dell Support from a telephone near or at the computer so that the support staff can assist you with any necessary procedures.

NOTE: Dell's Express Service Code system may not be available in all countries.

When prompted by Dell's automated telephone system, enter your Express Service Code to route the call directly to the proper support personnel. If you do not have an Express Service Code, open the **Dell Accessories** folder, double-click the **Express Service Code** icon, and follow the directions.

NOTE: Some of the following services are not always available in all locations outside the continental U.S. Call your local Dell representative for information on availability.

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Technical Support and Customer Service

Dell's support service is available to answer your questions about Dell hardware. Our support staff uses computer-based diagnostics to provide fast, accurate answers.

To contact Dell's support service, see "Before You Call" on page 44 and then see the contact information for your region or go to **support.dell.com**.

DellConnect™

DellConnect is a simple online access tool that allows a Dell service and support associate to access your computer through a broadband connection, diagnose your problem and repair it all under your supervision. For more information, go to **support.dell.com** and click **DellConnect**.

Online Services

You can learn about Dell products and services on the following websites:

- **www.dell.com**
- **www.dell.com/ap** (Asian/Pacific countries only)
- **www.dell.com/jp** (Japan only)
- **www.euro.dell.com** (Europe only)
- **www.dell.com/la** (Latin American and Caribbean countries)
- **www.dell.ca** (Canada only)

You can access Dell Support through the following websites and e-mail addresses:

Dell Support websites

- **support.dell.com**
- **support.jp.dell.com** (Japan only)
- **support.euro.dell.com** (Europe only)

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Dell Support e-mail addresses

- **mobile_support@us.dell.com**
- **support@us.dell.com**
- **la-techsupport@dell.com** (Latin America and Caribbean countries only)
- **apsupport@dell.com** (Asian/Pacific countries only)

Dell Marketing and Sales e-mail addresses

- **apmarketing@dell.com** (Asian/Pacific countries only)
- **sales_canada@dell.com** (Canada only)

Anonymous file transfer protocol (FTP)

- **ftp.dell.com**

  Log in as user: anonymous, and use your e-mail address as your password.

AutoTech Service

Dell's automated support service–AutoTech– provides recorded answers to the questions most frequently asked by Dell customers about their portable and desktop computers.

When you call AutoTech, use your touch-tone telephone to select the subjects that correspond to your questions. For instructions on accessing the telephone number to call your region, see "Contacting Dell" on page 45.

Automated Order-Status Service

To check on the status of any Dell products that you have ordered, you can go to **support.dell. com**, or you can call the automated order-status service. A recording prompts you for the information needed to locate and report on your order. For the telephone number to call your region, see "Contacting Dell" on page 45 for problems with your order.

If you have a problem with your order, such as missing parts, wrong parts, or incorrect billing, contact Dell for customer assistance. Have your invoice or packing slip handy when you call. For the telephone number to call for your region, see "Contacting Dell" on page 45.

Product Information

If you need information about additional products available from Dell, or if you would like to place an order, visit the Dell website at **www.dell.com**. For the telephone number to call for your region or to speak to a sales specialist, see "Contacting Dell" on page 45.

Returning Items for Repair Under Warranty or for Credit

Prepare all items being returned, whether for repair or credit, as follows:

1. Call Dell to obtain a Return Material Authorization Number, and write it clearly and prominently on the outside of the box.

2. For the telephone number to call for your region, see "Contacting Dell" on page 45.

3. Include a copy of the invoice and a letter describing the reason for the return.

4. Include a copy of the Diagnostics Checklist (see "Diagnostic Checklist" on page 44), indicating the tests that you have run and any error messages reported by the Dell Diagnostics (see "Dell Diagnostics" on page 32).

5. Include any accessories that belong with the item(s) being returned (power cables, software, guides, and so on) if the return is for credit.

6. Pack the equipment to be returned in the original (or equivalent) packing materials.

7. You are responsible for paying shipping expenses. You are also responsible for insuring any product returned, and you assume the risk of loss during shipment to Dell. Collect On Delivery (C.O.D.) packages are not accepted.

8. Returns that are missing any of the preceding requirements will be refused at Dell's receiving dock and returned to you.

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Before You Call

📝 **NOTE:** Have your Express Service Code ready when you call. The code helps Dell's automated-support telephone system direct your call more efficiently. You may also be asked for your Service Tag (located on the back or bottom of your computer).

Remember to fill out the following Diagnostics Checklist. If possible, turn on your computer before you call Dell for assistance and call from a telephone at or near the computer. You may be asked to type some commands at the keyboard, relay detailed information during operations, or try other troubleshooting steps possible only at the computer itself. Ensure that the computer documentation is available.

Diagnostic Checklist

• Name:

• Date:

• Address:

• Phone number:

• Service Tag (bar code on the back or bottom of the computer):

• Express Service Code:

• Return Material Authorization Number (if provided by Dell support technician):

• Operating system and version:

• Devices:

• Expansion cards:

• Are you connected to a network? Yes /No

• Network, version, and network adapter:

• Programs and versions:

See your operating system documentation to determine the contents of the computer's start-up files. If the computer is connected to a printer, print each file. Otherwise, record the contents of each file before calling Dell.

• Error message, beep code, or diagnostic code:

• Description of problem and troubleshooting procedures you performed:

Contacting Dell

For customers in the United States, call 800-WWW-DELL (800-999-3355).

NOTE: If you do not have an active Internet connection, you can find contact information on your purchase invoice, packing slip, bill, or Dell product catalog.

Dell provides several online and telephone-based support and service options. Availability varies by country and product, and some services may not be available in your area.

To contact Dell for sales, technical support, or customer service issues:

1. Visit **support.dell.com**.

2. Verify your country or region in the **Choose A Country/Region** drop-down menu at the bottom of the page.

3. Click **Contact Us** on the left side of the page.

4. Select the appropriate service or support link based on your need.

5. Choose the method of contacting Dell that is convenient for you.

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Finding More Information and Resources

If you need to:	See:
reinstall your operating system.	your Operating System disc.
run a diagnostic program for your computer, reinstall desktop system software, or update drivers for your computer, and readme files.	the *Drivers and Utilities* disc. 🖉 **NOTE:** Drivers and documentation updates can be found on the Dell™ Support website at **support.dell.com**.
learn more about your operating system, maintaining peripherals, RAID, Internet, Bluetooth®, networking, and e-mail.	the *Dell Technology Guide* installed on your hard drive.
upgrade your computer with new or additional memory, or a new hard drive.	the *Service Manual* on the Dell Support website at **support.dell.com**
reinstall or replace a worn or defective part.	🖉 **NOTE:** In some countries, opening and replacing parts of your computer may void your warranty. Check your warranty and return policies before working inside your computer.

If you need to:	See:
find safety best practices information for your computer	the safety and regulatory documents that shipped with your computer and also see the Regulatory Compliance Homepage on www.dell.com at the following location: www.dell/regulatory_compliance
review Warranty information, Terms and Conditions (U.S. only), Safety instructions, Regulatory information, Ergonomics information, and End User License Agreement.	
find your Service tag/Express Service Code— You must use the service tag to identify your computer on **support.dell.com** or to contact technical support.	the back or bottom of your computer.
find drivers and downloads.	the Dell™ Support website at **support.dell.com.**
access technical support and product help.	
check on your order status for new purchases.	
find solutions and answers to common questions.	
locate information for last-minute updates about technical changes to your computer or advanced technical-reference material for technicians or experienced users.	

Basic Specifications

System Model

Studio Hybrid 140g

This section provides basic information that you may need when setting up, updating drivers for, and upgrading your computer. For more detailed specifications, see the *Service Manual* on the Dell Support website at **support.dell.com**.

NOTE: Offerings may vary by region. For more information regarding the configuration of your computer, click **Start** → **Help and Support** and select the option to view information about your computer.

Processor

Type	L2 cache
Intel® Celeron®	1 MB
Intel Celeron Dual-Core	512 KB
Intel Pentium® Dual-Core	1 MB
Intel Core™ 2 Duo	2 MB/3 MB/6 MB

Drives

Externally accessible	One 5.25-inch drive bay SATA DVD-ROM or DVD+/-RW/Blu-ray Disc™ optical drive
Internally accessible	One 2.5-inch drive bay SATA hard drive

Memory

Connectors	two internally-accessible SO-DIMM sockets
Capacities	512 MB, 1 GB, and 2 GB
Memory type	533 MHz, 667 MHz DDR2 SO-DIMM
Minimum	1 GB
Maximum	4 GB

NOTE: For instructions on upgrading your memory, see the *Service Manual* on the Dell Support website at **support.dell.com**.

Computer Information

System Chipset	Intel GM965 + ICH8M
Data bus width	64 bits
DRAM bus width	dual channel (2) 64-bit buses
Processor address bus width	32 bits
Flash EPROM	8 MB

Expansion Bus

Bus types	SATA 1.0, 2.0, and USB 2.0
Bus speeds	SATA: 1.5 Gbps and 3.0 Gbps
	USB: 480 Mbps high speed, 12 Mbps full speed, and 1.2 Mbps low speed

Physical (Without Stand in Vertical Orientation)

Height (with sleeve)	211.5 mm (8.33 in)
Width (with sleeve)	71.5 mm (2.81 in)
Depth (with sleeve)	196.5 mm (7.74 in)
Weight (without sleeve)	1.8 kg (3.97 lb.)

System Board Connectors

Processor	one 478-pin connector
Memory	two 200-pin SO-DIMM slots
Mini-Card	two 52-pin connectors

Power

Maximum heat dissipation	221.789 BTU/hr
Voltage	19.5 Vdc and 3.34 A

NOTE: Check the frequency and voltage rating for the AC adapter to ensure that it matches the available power source.

AC Adapter

Types	3 Pin and 2 Pin
Input voltage	100–240 VAC
Input current (maximum)	1.5A
Input frequency	50–60 Hz
Output current	3.34A
Output power	65 W

AC Adapter

Rated output voltage	19.5 VDC
Dimensions:	
Height	16 mm (0.6 in)
Width	66 mm (2.6 in)
Length	127 mm (5.0 in)
Weight (without cables)	0.25 kg (0.55 lb)
Temperature ranges:	
Operating	0° to 40°C
Storage	⁻40° to 70°C

Computer Environment

Temperature ranges:	
Operating	10° to 35°C
Storage	⁻40° to 70° C
Relative humidity (maximum):	20% to 80% (noncondensing)

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Computer Environment

Maximum vibration (using a random-vibration spectrum that simulates user environment):

Operating	5 to 350 Hz at 0.0002 G2/Hz
Storage	5 to 500 Hz at 0.001 to 0.01 G2/Hz

Maximum shock (measured with hard drive in head-parked position and a 2-ms half-sine pulse):

Operating	40 G +/- 5% with pulse duration of 2 msec +/- 10% (equivalent to 20 in/sec [51 cm/sec])

Computer Environment

Storage	105 G +/- 5% with pulse duration of 2 msec +/- 10% (equivalent to 50 in/sec [127 cm/sec])

Altitude (maximum):

Operating	⁻15.2 to 3048 m (⁻50 to 10,000 ft)
Storage	⁻15.2 to 10,668 m (⁻50 to 35,000 ft)
Airborne contaminant level	G2 or lower as defined by ISA-S71.04-1985

Appendix

The information in this document also applies to the products listed below:

- Dell Studio
- Dell Studio Hybrid
- Dell Hybrid
- Dell Studio 140g
- Dell Studio 140gn
- Dell Studio 140
- Dell Studio 140n
- Dell Studio Hybrid 140g
- Dell Studio Hybrid 140gn
- Dell Studio Hybrid 140
- Dell Hybrid 140g

- Dell Studio Hybrid 140n
- Dell Hybrid 140gn
- Dell Hybrid 140
- Dell Hybrid 140n
- Dell Inspiron™ 140g)
- Dell Inspiron 140gn
- Dell Inspiron 140
- Dell Inspiron 140n
- Dell Dimension™ 140g
- Dell Dimension 140gn

- Dell Dimension 140
- Dell Dimension 140n

- Dell Inspiron
- Dell Dimension

Macrovision Product Notice

This product incorporates copyright protection technology that is protected by method claims of certain U.S. patents and other intellectual property rights owned by Macrovision Corporation and other rights owners. Use of this copyright protection technology must be authorized by Macrovision Corporation, and is intended for home and other limited viewing uses only unless otherwise authorized by Macrovision Corporation. Reverse engineering or disassembly is prohibited.

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Your Studio Hybrid was designed with the environment in mind.

Learn more at www.dell.com/hybrid.

www.dell.com | support.dell.com

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