Studio XPS.







Model DCRM

Notes, Cautions, and Warnings



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

MARNING: A WARNING 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.

Information in this document is subject to change without notice.

© 2009 Dell Inc. All rights reserved.

Reproduction of these materials in any manner whatsoever without the written permission of Dell Inc. is strictly forbidden.

Trademarks used in this text: Dell, the DELL logo, YOURS IS HERE, Studio XPS, Dell On Call, and DellConnect are trademarks of Dell Inc.; Intel is a registered trademark and Core is a trademark of Intel Corporation in the U.S. and other countries; Microsoft, Windows, Windows Vista, and Windows Vista start button logo are either trademarks or registered trademarks of Microsoft Corporation in the United States and/or other countries; Blu-ray Disc is a trademark of the Blu-ray Disc Association; Bluetooth is a registered trademark owned by Bluetooth SIG, Inc. and is used by Dell under license.

Other trademarks and trade names may be used in this document to refer to either the entities claiming the marks and names or their products. Dell Inc. disclaims any proprietary interest in trademarks and trade names other than its own.

July 2009

P/N KYX1Y

Rev. A00

Contents

Solving Problems26
Beep Codes26
Network Problems27
Power Problems28
Memory Problems
Lockups and Software Problems
Using Support Tools33
Dell Support Center33
System Messages
Hardware Troubleshooter36
Dell Diagnostics36
Restoring Your Operating System40
System Restore
Dell Factory Image Restore42
Operating System Reinstallation

Contents

Getting Help		
Technical Support and Customer	Resources	54
Service	Specifications	56
DellConnect™	Appendix	61
Online Services	Macrovision Product Notice	
Automated Order-Status Service49	Index	co
Product Information49	muex	υZ
Before You Call		
Contacting Dell		

Setting Up Your Studio XPS Desktop

This section provides information about setting up your Studio XPS™ 435T/9000 and connecting peripherals.

MARNING: Before you begin any of the procedures in this section, read the safety information that shipped with your computer. For additional safety best practices information, see the Regulatory Compliance Homepage at www.dell.com/regulatory_compliance.

Setting Up Your Studio XPS Desktop

NOTE: Your computer's Service Tag is located on a label under the FlexBay panel on the front of your computer. Use this code to identify your computer when you access the Dell Support website or contact technical support.

WWW.DELL.COM
Service Tag: XXXXX
Express Service Code: XXX-XXX-XX



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

Setting Up Your Studio XPS Desktop

Connect the Display

Your computer does not have an integrated video connector. You must use the connector available on the video card in the expansion slot to connect to the display.

Connect the Video Cable to the Display

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.

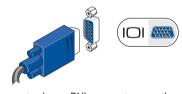


Connect the display using either the VGA connector, the DVI connector, the HDMI connector, or the DisplayPort connector.

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 VGA connector carries only video signals for displays such as monitors and projectors.

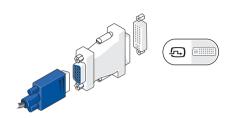
Connect Using the VGA Connector

Connect the display using a VGA cable (which usually has blue connectors at both ends).



If your computer has a DVI connector, use the VGA cable (with blue connectors at both ends) with a DVI-to-VGA adapter (white connector).

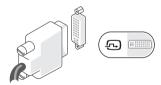
Setting Up Your Studio XPS Desktop



You can purchase a DVI-to-VGA adapter from the Dell website at **www.dell.com**.

Connect Using the DVI Connector

Connect the display using a DVI cable.



You can purchase additional HDMI and DVI cables from the Dell website at www.dell.com.

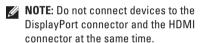
Connect Using the HDMI Connector

Connect the display using an HDMI cable.



Connect Using the DisplayPort Connector

Connect the display using a DisplayPort cable.

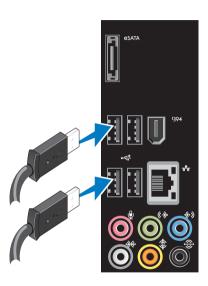




NOTE: For more information on connecting the display, see the documentation that shipped with your display.

Connect the Keyboard and Mouse

Connect the USB keyboard and mouse to the USB connectors on the back panel of your computer.

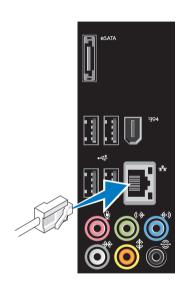


Connect the Network Cable (Optional)

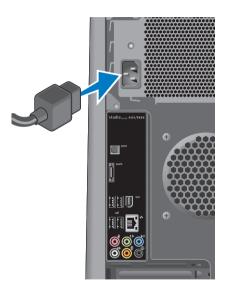
A network connection is not required to complete your computer setup, but if you have an existing network or Internet connection that uses a cable connection (such as a broadband device or Ethernet jack), you can connect it now.

NOTE: Use only an Ethernet cable to connect to the network connector (RJ45) connector). Do not plug a telephone cable (RJ11 connector) into the network connector.

To connect your computer to a network or a broadband device, connect one end of the network cable to the network port or the broadband device. Connect the other end of the network cable to the network connector (RJ45 connector) on the back panel of your computer. A click indicates that the network cable has been securely attached.



Connect the Power Cable



Press the Power Button



Set Up Microsoft Windows Vista

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

- CAUTION: Do not interrupt the operating system's setup process. Doing so may render your computer unusable and you will need to reinstall the operating system.
- NOTE: It is recommended that you download and install the latest BIOS and drivers for your computer available on the Dell Support website at support.dell.com.

Connect to the Internet (Optional)

To connect to the Internet, you need an external modem or network connection, and an Internet Service Provider (ISP).

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

Setting Up a Wired Connection

- If you are using a dial-up connection, connect the telephone line to the external USB modem (optional) and to the telephone wall connector 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.

To complete setting up your wired Internet connection, follow the instructions in "Setting Up Your Internet Connection" on page 15.

Setting Up a Wireless Connection

NOTE: To set up your wireless router, see the documentation that shipped with your router.

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:

- Save and close any open files, and exit any open programs.
- 2. Click Start ♠ Connect To.
- Follow the instructions on the screen to complete the setup.

Setting Up Your Internet Connection

ISPs and ISP offerings vary by country. Contact your ISP for offerings available in your country. 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.

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



NOTE: The following instructions are applicable to the Windows default view. so they may not apply if you set your Dell™ computer to the Windows Classic view.

- 1. Save and close any open files, and exit any open programs.
- 3. Click Network and Internet→ Network and Sharing Center \rightarrow Setup a Connection \rightarrow Connect to the Internet.

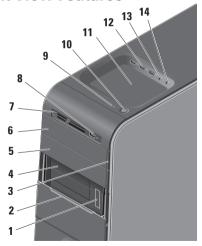
The Connect to the Internet window appears.

- NOTE: If you do not know which type of connection to select, click Help me choose or contact your ISP.
- 4 Follow the instructions on the screen and use the setup information provided by your ISP to complete the setup.

Using Your Studio XPS Desktop

This section provides information about the features available on your Studio XPS™ Desktop.

Front View Features



- Service Tag and Express Service Code (located on a label under the FlexBay panel) — Used to identify your computer when you access the Dell Support website or call technical support.
- FlexBay panel Covers the FlexBay slots.
- 3 Optical drive eject button Press the marked portion on the lower end of the button to eject the disc.
- 4 FlexBay slots (2) Supports a floppy drive, a Media Card Reader, or an additional hard drive.
- 5 Optical drive bay Can contain an additional optical drive.

- 6 Optical drive Plays or records only standard-size (12 cm) CDs, DVDs, and Blu-ray Discs.
- 7 Media Card Reader Provides a fast and convenient way to view and share digital photos, music, and videos stored on a memory card.
- 8 USB 2.0 connector Connects to USB devices that are connected occasionally such as memory keys, digital cameras, and MP3 players.
- 9 Hard drive activity light Turns on when the computer reads or writes data. A blinking blue light indicates hard drive activity.

CAUTION: To avoid loss of data, never turn off the computer while the hard drive activity light is blinking.

- 10 Power button and light Turns the power on or off when pressed. The light in the center of this button indicates the power state:
 - Off the computer is either turned off or is not receiving power.
 - Blinking white the computer is in sleep state.
 - Solid white the computer is on.
 - Blinking amber there may be a problem with the system board.
 - Solid amber there may be a problem with either the system board or power supply.

NOTE: For information on power problems, see "Power Problems" on page 28.

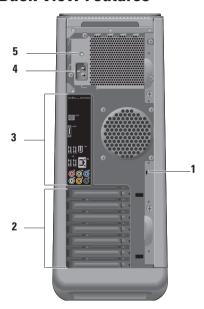
11 Accessory tray — Used to place devices or secure cables to avoid clutter.

Using Your Studio XPS Desktop

- 12 USB 2.0 connectors (3) Connects to USB devices that are connected occasionally such as memory keys, digital cameras, and MP3 players.
- Line-in or microphone connector —
 Connects to a microphone for voice or to an audio cable for audio input.
- 14 Headphone connector Connects to headphones.

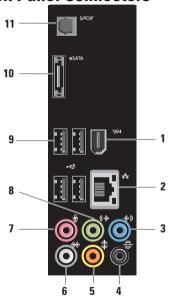
NOTE: To connect to a powered speaker or sound system, use the audio out or S/PDIF connector on the back of your computer.

Back View Features



- 1 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.
- 2 Expansion card slots Provides access to connectors for any installed PCI and PCI express cards.
- 3 Back panel connectors Plug USB, audio, and other devices into the appropriate connector.
- 4 Power connector Connects to the power cable. Appearance of this connector may vary.
- 5 Power supply light Indicates power availability of the power supply.

Back Panel Connectors



- 1 ISP4 IEEE 1394 connector Connects to high-speed serial multimedia devices such as digital video cameras.
- 2 Network connector and light—
 Connects your computer to a network or broadband device. The network activity light blinks 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.
- 3 Line-in connector Connects to a record or playback device such as a microphone, cassette player, CD player, or VCR.
- Rear L/R surround connector —
 Connects to multichannel capable speakers.

- 5 Center/subwoofer connector —
- 6 Side L/R surround connector —
 Connects to surround sound speakers.
 On computers with a sound card, use the connector on the card.
- Microphone connector Connects to a microphone for voice or audio input into a sound or telephony program.

 On computers with a sound card, use the connector on the card.
- 8 Front L/R line-out connector —
 Connects to headphones and speakers
 with integrated amplifiers.
 On computers with a sound card, use the
 connector on the card

- 9 USB 2.0 connectors (4) Connects to USB devices, such as a mouse, keyboard, printer, external drive, or MP3 player.
- 10 eSATA connector Connects to external SATA storage devices.
- amplifiers or TVs for digital audio through optical digital cables. This format carries an audio signal without going through an analog audio conversion process.

Software Features

NOTE: For more information about the features described in this section, see the Dell Technology Guide available 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 support 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 a 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. Windows Vista® provides the following 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.

Transferring Information to a New Computer

- NOTE: The following steps are applicable for the Windows default view, so they may not apply if you set your Dell™ computer to the Windows Classic view.
- Click Start ⊕ → Control Panel → System and Maintenance → Welcome Center → Transfer files and settings.
 If the User Account Control window appears, click Continue.
- 2. Follow the instructions on the Windows Easy Transfer wizard.

Backing Up Your Data

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

- **NOTE:** Certain editions of Windows Vista provide an option to back up your computer.
- 2. Follow the instructions on the Back Up Files wizard

Dell Dock

The Dell Dock is a group of icons that provides easy access to frequently-used applications, files, and folders. You can personalize the Dock by:

- · Adding or removing icons
- · Grouping related icons into categories

- Changing the color and location of the Dock
- Changing the behavior of the icons



Add a Category

- Right-click the Dock, click Add→ Category.
 The Add/Edit Category window is displayed.
- 2. Enter a title for the category in the Title field.
- Select an icon for the category from the Select an image: box.
- 4. Click Save.

Add an Icon

Drag and drop the icon to the Dock or a category.

Remove a Category or Icon

- 1. Right-click the category or icon on the Dock and click **Delete shortcut** or **Delete category**.
- 2. Follow the instructions on the screen.

Personalize the Dock

- Right-click the Dock and click Advanced Setting....
- 2. Choose the desired option to personalize the Dock.

Solving Problems

This section provides troubleshooting information for your computer. If you are unable to solve your problem using the following guidelines, see "Using Support Tools" on page 33 or "Contacting Dell" on page 53.

MARNING: 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.

WARNING: Before working inside your computer, read the safety information that shipped with your computer. For additional safety best practice information, see the Regulatory Compliance Homepage at www.dell.com/regulatory_compliance.

Beep Codes

Your computer might emit a series of beeps during start-up if the monitor cannot display errors or problems. The following repetitive beep codes help you troubleshoot problems with your computer.

NOTE: To replace parts, see the *Service Manual* on the Dell Support website at **support.dell.com**.

One beep — BIOS ROM checksum failure; possible motherboard failure

Contact Dell (see "Contacting Dell" on page 53).

Two beeps — No RAM detected

 Remove the memory modules, reinstall one module and restart the computer. If the computer starts normally, reinstall an additional module. Continue until you have identified a faulty module or reinstalled all modules without an error

- If available, install memory modules of the same type in your computer.
- If the problem persists, contact Dell (see "Contacting Dell" on page 53).

Three beeps — Possible motherboard failure Contact Dell (see "Contacting Dell' on page 53).

Four beeps — RAM read/write failure

- Ensure that no special memory module/ memory connector placement requirements exist (see the Service Manual on the Dell Support website at support.dell.com).
- Verify that the memory modules that you are installing are compatible with your computer.
- If the problem persists, contact Dell (see "Contacting Dell" on page 53).

Five beeps — Real Time Clock failure Replace the battery.

Six beeps — Video BIOS test failure
Contact Dell (see "Contacting Dell" on page 53).

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 $\bigcirc \rightarrow$ Connect To.
 - Follow the instructions on the screen to complete the setup.

Solving Problems

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 and network activity lights on the integrated network connector let you verify that your connection is working and provide information on the status:

- No activity Both the link integrity and network activity lights are off.
- 10 Mbs The link integrity light is off and the network activity light is blinking yellow.
- 100 Mbs The link integrity light is green and the network activity light is blinking yellow.
- 1000 Mbs The link integrity light is orange and the network activity light is blinking yellow.

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.
- Ensure that the power supply light on the back of the computer is on. If the light is off there may be a possible problem with the power supply or the power cable.

If the problem persists, contact Dell (see "Contacting Dell" on page 53).

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 Sleep state. Press a key on the keyboard, move the mouse or a finger on the touch pad, or press the power button to resume normal operation.

If the power light is solid amber — There may be a problem with either the system board or the power supply. For assistance, contact Dell (see "Contacting Dell" on page 53).

If the power light is blinking amber — There may be a problem with the system board. For assistance, contact Dell (see "Contacting Dell" on page 53).

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 DDR3 memory. For more information about the type of memory supported by your computer, see "Specifications" on page 56.
- Run the Dell Diagnostics (see "Dell Diagnostics" on page 36).
- 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.

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 or a solid blue screen appears —

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

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.

Solving Problems

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.

- Click Start
 O → 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 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.

Using Support Tools

Dell Support Center

The **Dell Support Center** helps you find the service, support, and system-specific information you need.

To launch the application, click the icon in the taskhar.

The **Dell Support Center** home page displays your computer's model number, service tag, express service code, and service contact information.

The home page also provides links to access:



Self Help (Troubleshooting, Security, System Performance, Network/Internet, Backup/ Recovery, and Windows operating system)



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 PC CheckUp)



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

For more information about **Dell Support Center** and available support tools, click the **Services** tab 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.

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 53 for assistance).

CMOS checksum error — Possible motherboard failure or RTC battery low. Battery needs replacement. See the *Service Manual* on the Dell Support website at **support.dell.com** or see "Contacting Dell" on page 53 for assistance.

CPU fan failure — CPU fan has failed. CPU fan needs replacement. 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 53 for assistance.

Hard-disk drive read failure — Possible hard disk drive failure during HDD boot test. See "Contacting Dell" on page 53 for assistance.

Keyboard failure — Replace keyboard or check the cable for loose connection.

No boot device available — No bootable partition on hard drive, the hard 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.
- 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** or see "Contacting Dell" on page 53 for assistance.

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 drive failure. This
feature can be enabled or disabled in the BIOS
setup. See "Contacting Dell" on page 53 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 $\bigcirc \rightarrow$ Help and Support.
- Type hardware troubleshooter in the search field and press <Enter> to start the search.
- 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 31 and run the Dell Diagnostics before you contact Dell for technical assistance.

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

- **NOTE:** Dell Diagnostics works only on Dell computers.
- NOTE: The *Drivers and Utilities* disc 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* disc.

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 53.
- Ensure that the computer is connected to an electrical outlet that is known to be working properly.
- 2. Turn on (or restart) your computer.
- When the DELL[™] logo appears, press <F12> immediately. Select Diagnostics from the boot menu and press <Enter>.

This will invoke the Pre-Boot System Assessment (PSA) in some computers.

- 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* disc.

If PSA is invoked:

- a. The PSA starts running tests.
- b. If the PSA completes successfully, the following message is displayed: "No problems have been found with this system so far.

 Do you want to run the remaining memory tests? This will take about 30 minutes or more. Do you want to continue? (Recommended)."

Using Support Tools

c. If you are experiencing memory issues
 press <y>, else press <n>.
 The following message is displayed:
 "Booting Dell Diagnostic
 Utility Partition. Press any
 key to continue."

d. Press any key to go to the Choose An Option window.

If PSA is not invoked:

Press any key to start the Dell Diagnostics from the diagnostics utility partition on your hard drive and to go to the **Choose An Option** window.

- 4. Select the test you want to run.
- 5. If a problem is encountered during a test, a message appears with an error code and a description of the problem. Write down the error code and problem description and see "Contacting Dell" on page 53.

- NOTE: The Service Tag for your computer is located at the top of each test screen. If you contact Dell, technical support will ask for your Service Tag.
- When the tests are complete, close the test screen to return to the Choose An Option window.

To exit the Dell Diagnostics and to restart the computer, click **Exit**.

Starting Dell Diagnostics From the Drivers and Utilities Disc

- 1. Insert the Drivers and Utilities disc.
- 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.
- 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.
- Select Run the 32 Bit Dell Diagnostics from the numbered list. If multiple versions are listed, select the version appropriate for your computer.
- 7. Select the test you want to run.

- If a problem is encountered during a test, a message appears with an error code and a description of the problem. Write down the error code and problem description and contact Dell (see "Contacting Dell" on page 53).
- NOTE: The Service Tag for your computer is located at the top of each test screen.

 The Service Tag helps you identify your computer when you contact Dell.
- When the tests are complete, close the test screen to return to the Choose An Option window.
 - To exit the Dell Diagnostics and restart the computer, click **Exit**.
- 10. Remove the Drivers and Utilities disc.

Restoring Your Operating System

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. This procedure permanently deletes all data on the hard drive and removes 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 restore 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.

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

NOTE: The procedures in this document are applicable 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 📀 .
- 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.
- 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 📀 .
- In the Start Search box, type System Restore and press <Enter>.
- Click Undo my last restoration and click Next.

Dell Factory Image Restore

CAUTION: 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. 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.

Performing Dell Factory Image Restore

- Turn on the computer. When the Dell logo appears, press <F8> several times to access the Vista Advanced Boot Options Window.
- 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.
- 2. Select Repair Your Computer.
- The System Recovery Options window appears.
- 4. Select a keyboard layout and click Next.
- 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.
- 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.
- Click Next. The Confirm Data Deletion screen appears.
- **NOTE:** If you do not want to proceed with Factory Image Restore, click **Cancel**.
- Click the check box 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 Microsoft® 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 "System Restore" on page 40.

 \triangle

CAUTION: 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 disc
- Dell Drivers and Utilities disc



NOTE: The Dell Drivers and Utilities disc contains drivers that were installed during the assembly of the computer. Use the Dell Drivers and Utilities disc to load any required drivers. Depending on the region from which you ordered your computer, or whether you requested the disc, the Dell Drivers and Utilities disc and Operating System disc 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.

- Save and close any open files and exit any open programs.
- 2. Insert the Operating System disc.
- Click Exit if the Install Windows message appears.
- 4. 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.
- 6. When the boot device list appears, highlight CD/DVD/CD-RW Drive and press <Enter>.
- Press any key to Boot from CD-ROM. Follow the instructions on the screen to complete the installation.

Getting Help

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

- See "Solving Problems" on page 26 for information and procedures that pertain to the problem your computer is experiencing.
- 2. See "Dell Diagnostics" on page 36 for procedures on how to run Dell Diagnostics.
- Fill out the "Diagnostic Checklist" on page 52.
- 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 48 for a more extensive list of Dell Support online.
- If the preceding steps have not resolved the problem, see "Contacting Dell" on page 53.

- 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.

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 52 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 www.dell.com/dellconnect.

Getting Help

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)

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.

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 53.

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 53.

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 53.

Returning Items for Repair Under Warranty or for Credit

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



NOTE: Before you return the product to Dell, make sure to back up any data on the hard drive and on any other storage device in the product. Remove any and all confidential, proprietary and personal information, as well as removable media. such as CDs and PC Cards. Dell is not responsible for any of your confidential, proprietary or personal information; lost or corrupted data; or damaged or lost removable media that may be included with vour return.

- 1 Call Dell to obtain a Return Material Authorization Number, and write it clearly and prominently on the outside of the box. For the telephone number to call for your region, see "Contacting Dell" on page 53.
- 2. Include a copy of the invoice and a letter describing the reason for the return.
- 3. Include a copy of the Diagnostics Checklist (see "Diagnostic Checklist" on page 52), indicating the tests that you have run and any error messages reported by the Dell Diagnostics (see "Dell Diagnostics" on page 36).
- 4. Include any accessories that belong with the item(s) being returned (power cables. software, guides, and so on) if the return is for credit.

- **5.** Pack the equipment to be returned in the original (or equivalent) packing materials.
- NOTE: 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.
- NOTE: Returns that are missing any of the preceding requirements will be refused at Dell's receiving dock and returned to you.

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 a label under the FlexBay panel).

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 and Express Service Code (located on a label under the flexBay panel):
- 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 telephonebased 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.

Finding More Information and Resources

If you need to:	See:
reinstall your operating system	the Operating System disc
find your system model number	the back of your computer
run a diagnostic program for your computer, reinstall desktop system software, or update drivers for your computer, and readme files	the <i>Drivers and Utilities</i> 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 <i>Dell Technology Guide</i> available on your hard drive
upgrade your computer with new or additional memory, or a new hard drive	the <i>Service Manual</i> 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.

safety and regulatory documents that oped with your computer and also see the ulatory Compliance Homepage at w.dell.com/regulatory_compliance
label under the FlexBay panel
Dell Support website at port.dell.com

Specifications

Computer Model

Studio XPS™ 435T/9000

This section provides information that you may need when setting up, updating drivers for, and upgrading your computer.



NOTE: Offerings may vary by region. For more information regarding the configuration of your computer, click the option to view information about your computer.

Processor

Intel® Core™ i7 Type L2 cache up to 1 MB 13 cache 8 MB

Drives

two 5.25-inch drive Externally accessible bays for SATA

DVD+/-RW Super Multi Drive or Blu-ray Disc™ combo or Blu-ray Disc RW optical drive

two 3.5 inch bays for a Flexdock and a Bluetooth® module

Drives		Memory	
Internally accessible	three 3.5-inch drive	Minimum	2 GB
bays for SATA h drives	bays for SATA hard drives	Maximum	24 GB
Memory		NOTE: For instructions on upgrading your memory, see the <i>Service Manual</i> on the	
Connectors six internally- accessible DDR3 DIMM sockets	,	Dell Support web	site at support.dell.com .
	Computer Information	tion	
Capacities	1 GB, 2 GB, and 4 GB	System chipset	Intel X58 + ICH10R
	(32-bit operating system)	QPI width link	20 lanes (16 data lanes, 4 CRC lanes)
	1 GB, 2 GB, and	DRAM bus width	192 bits
	greater than 4 GB (64-bit operating system)	RAID support	RAID 0 (striping) RAID 1 (mirroring)
Memory type	1066-MHz DDR3 DIMM; non-ECC memory only	BIOS chip (NVRAM)	16 MB

Specifications

Video		External conne	ctors
Discrete	PCI Express x16 card	Network adapter	RJ45 connector
Audio		USB	three top-panel, one
Type Integrated 7.1 channel, High		front-panel, and four back-panel USB 2.0-compliant connectors	
Communication	Definition Audio with S/PDIF support	Audio	top panel - one microphone and one headphone connector
Communication	WiFi/Bluetooth		back panel - six
Wireless (optional)	wireless technology		connectors for 7.1 support
	wireless technology	S/PDIF	one S/PDIF (optical) connector
Physical		eSATA	one back-panel connector
Height	493 mm (19.40 inches)	IEEE 1394	one back-panel 6-pin
Width	198 mm (7.79 inches)		serial connector
Depth	528 mm (20.78 inches)		
Weight	20.01 kg (44.11 lb)		

58

Power DC Power Supply		Computer Environment Temperature ranges:	
Maximum heat	1621 Btu/h	Storage	- 40° to 70° C (-40°F to 149°F)
dissipation	NOTE: Heat dissipation is calculated by using the power supply wattage rating.	Relative humidity (maximum):	20% to 80% (noncondensing)
Voltage 100-240 VAC. 50-60 Hz, 10.0 A NOTE: For information on voltage settings, see the safety information shipped with your computer.	3 3	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	
Coin-cell battery	3-V CR2032 lithium coin cell		

Specifications

•	-
Computer	Environment
oomputer	LIIVII OIIIIICIIC

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 inches/sec

[51 cm/sec])

Storage 105 G +/- 5% with pulse

duration of 2 msec +/- 10%

(equivalent to 50 inches/sec

[127 cm/sec])

Computer Environment

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 G2 or lower as defined by

contaminant ISA-S71.04-1985

level

Appendix

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.

Index

В	customizing your desktop 22
backups creating 24	your energy settings 23
calling Dell 52 CDs, playing and creating 22 chipset 57 computer capabilities 22 connect(ing) displays 8 optional network cable 11 to the Internet 14 conserving energy 23 Contacting Dell online 53	D data, backing up 24 DellConnect 47 Dell Diagnostics 36 Dell Factory Image Restore 40 Dell Support Center 33 Dell support website 55 Dell Technology Guide for futher information 54 Diagnostic Checklist 52 drivers and downloads 55
customer service 47	DVDs, playing and creating 22

E	hardware problems	
eject button 16	diagnosing 36	
email addresses	Hardware Troubleshooter 36	
for technical support 48	HDMI	
energy	display 8	
conserving 23	1	
Express Service Code 46	- IEEE 1394 connector 20	
F	Internet connection 14	
finding more information 54	ISP	
front-side connectors 16	Internet Service Provider 14	
FTP login, anonymous 48	L	
Н	line-in connector 18	
hard drive		
type 57		

hard drive activity light 17

Index

M memory problems power button and light 17 solvina 30 power problems, solving 28 memory support 57 processor 56 microphone connector 18 R N reinstalling Windows 40 network connection resources, finding more 54 fixing 28 restoring factory image 42 network connector S location 20 security cable slot 19 network speed Service Tag 16, 52 testing 27 shipping products for return or repair 50 optical audio connector software features 22 S/PDIF connection 21 software problems 31 S/PDIF connector 21 order status 49

specifications 26, 33, 40 support email addresses 48 support sites worldwide 48 System Messages 34 System Restore 40 technical support 47 temperature operating and storage ranges 59 U **USB 2.0** back connectors 21 front connectors 17, 18

W

warranty returns 50
Windows, reinstalling 40
Windows Vista®
Program Compatibility Wizard 32
reinstalling 45
wireless network connection 27







Printed in the U.S.A.

www.dell.com | support.dell.com



0KYX1YA00

Free Manuals Download Website

http://myh66.com

http://usermanuals.us

http://www.somanuals.com

http://www.4manuals.cc

http://www.manual-lib.com

http://www.404manual.com

http://www.luxmanual.com

http://aubethermostatmanual.com

Golf course search by state

http://golfingnear.com

Email search by domain

http://emailbydomain.com

Auto manuals search

http://auto.somanuals.com

TV manuals search

http://tv.somanuals.com