

ALIENWARE® M15x MOBILE MANUAL

Notes, Cautions, and Warnings

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

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

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

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INTRODUCTION

Dear Valued Alienware Customer,

Welcome to the Alienware family. We are thrilled to include you among the growing number of savvy high-performance computer users.

The Alienware technicians who have crafted your computer have made certain that your high-performance computer is properly optimized and performs to its fullest potential. We build computers with a single unwavering purpose: Build It As If It Were Your Own. The technicians will not rest until your new computer meets or exceeds our very demanding criteria!

We have tested your computer extensively in order to ensure that you enjoy the highest levels of performance. In addition to a standard burn-in period, your computer has been evaluated using real-world tools such as synthetic performance benchmarks.

We invite you to share your experience with your new high-performance computer with us, so do not hesitate to either e-mail or call Alienware with any questions or concerns. The entire staff shares your enthusiasm for new technology and we hope that you enjoy using your new computer as much as Alienware enjoyed building it for you.

Sincerely,

Alienware Staff

CHAPTER 1: SETTING UP YOUR LAPTOP

CHAPTER 1: SETTING UP YOUR LAPTOP

Before Setting Up Your Laptop

Congratulations on the purchase of your Alienware® M15x!

Read all safety and setup instructions before connecting your new laptop. Begin by carefully opening the box and removing all components that were shipped to you. Before setting up your laptop or components, be sure to inspect all items for any physical damage that may have occurred during shipment. Be sure to report any damaged items to customer service immediately upon receiving your shipment. You must report shipping damage within the first 5 days of receiving the shipment or your damage report will not be honored.

Before setting up your laptop or components, see the included invoice to verify that all items ordered are present. Report any missing components to customer service within 5 days of receiving the shipment. Anything reported missing after the first 5 days of receiving a shipment will not be honored. Some of the most common items to check for include:

- Laptop and AC adapter with power cable
- Microsoft CD-key located at the bottom of the laptop
- Monitor with power cable and video cable (if ordered)
- Keyboard (if ordered)
- Mouse (if ordered)
- Multimedia speakers and sub-woofer (if ordered)
- Joystick controllers (if ordered)

You may also need a small flathead and/or a Phillips head screwdriver for connecting peripheral cables to the laptop.

Product Documentation and Media

The documentation that ships with your Alienware® laptop is designed to provide answers to many of the questions that may arise as you explore your new laptop's capabilities. You may see the documentation for technical information or general use as needed to answer questions in the future, or aid you in finding answers and solutions. The media included with your laptop is referenced in some sections of the documentation and may be needed to complete certain tasks. As always, our technical support staff is available to assist you.

Placing Your Laptop



WARNING: Do not place the laptop near or over a radiator or heating vent. If your laptop is placed in a cabinet, ensure that adequate ventilation is provided. Do not place the laptop in a humid location or in any area where the laptop may be exposed to rain or water. Be careful not to spill liquid of any kind on or into the laptop.

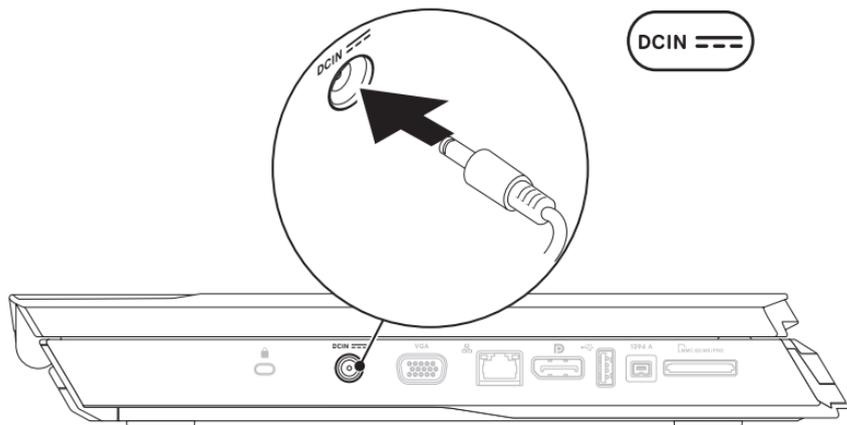
When placing your laptop, ensure that:

- It is placed on a surface that is both level and stable.
- The power and other cable connectors are not jammed between the laptop and a wall – or any other object.
- Nothing obstructs airflow in front of, behind, or below the laptop.
- The laptop has enough room so that optical drives and other external storage drives can be easily accessed.

Connect the AC Adapter



WARNING: The AC adapter works with electrical outlets worldwide. However, power connectors and power strips vary among countries. Using an incompatible cable or improperly connecting the cable to a power strip or electrical outlet may cause fire or equipment damage.

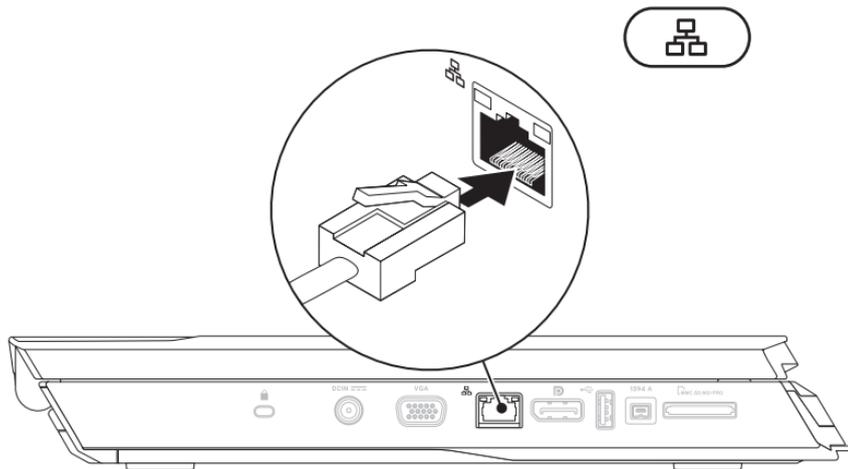


NOTE: The 150 W AC adapter must be connected to the laptop for maximum gaming performance.

Press the Power Button



Connect the Network Cable (Optional)



Set Up Microsoft Windows



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

Your computer is preconfigured with the operating system you requested while ordering your computer. To configure the remaining settings, follow the instructions on the screen.

Connect to the Internet (Optional)

Setting Up a Wired Connection

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

To complete setting up your wired Internet connection, follow the instructions in "Setting Up Your Internet Connection" on page 11.

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:

Windows Vista®

1. Ensure that wireless is enabled on your computer.
2. Save and close any open files, and exit any open programs.
3. Click **Start**  → **Connect To**.
4. Follow the instructions on the screen to complete the setup.

Windows® 7

1. Ensure that wireless is enabled on your computer.
2. Save and close any open files, and exit any open programs.
3. Click **Start**  → **Control Panel** → **Network and Sharing Center** → **Connect to a network**.
4. 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 Internet Service Provider (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.

Windows Vista®



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

1. Save and close any open files, and exit any open programs.
2. Click **Start**  → **Control Panel**.
3. Click **Network and Internet** → **Network and Sharing Center** → **Set up a connection or Network** → **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.

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

1. Click **Start**  → **Control Panel**.
2. Click **Network and Internet** → **Network and Sharing Center** → **Set up a connection or Network** → **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.

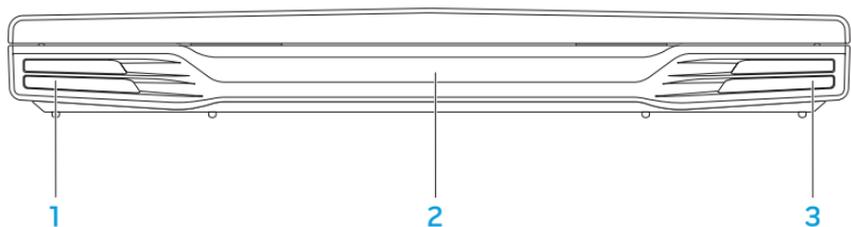
Follow the instructions on the screen and use the setup information provided by your ISP to complete the setup.

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CHAPTER 2: GETTING TO KNOW YOUR LAPTOP

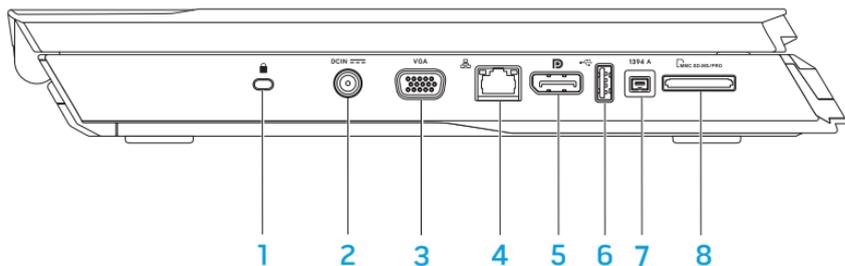
This chapter provides information about your new laptop to familiarize you with its various features, and get you up and running quickly.

Front View Features



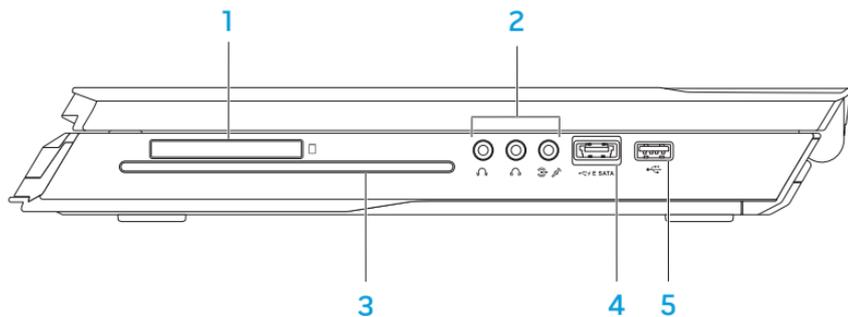
- 1 Left speaker** — Combines with the right speaker to provide high quality stereo sound.
- 2 Infrared port** — Connects to devices using infrared.
- 3 Right speaker** — Combines with the left speaker to provide high quality stereo sound.

Left View Features



-  **Security cable slot** — Attaches a commercially available antitheft device to the computer.
NOTE: Before you buy a lock, ensure that it works with the security lock slot on your computer.
-  **AC adapter connector** — Connects to an AC adapter to power the computer and charge the battery.
-  **VGA connector** — Connects to video devices, such as a monitor or projector.
-  **Network connector** — Connects your computer to a network or broadband device.
-  **DisplayPort connector** — Connects your computer to external monitors and projectors with DisplayPort.
-  **USB connector** — Connects to USB devices, such as a mouse, keyboard, printer, external drive, or MP3 player.
-  **IEEE 1394 A connector** — Connects to high-speed serial multimedia devices such as digital video cameras.
-  **8-in-1 Media Card Reader** — Provides a fast and convenient way to view and share digital photos, music, videos, and documents.

Right View Features



- 1  **ExpressCard slot** — Provides support for additional memory, wired and wireless communications, multimedia, and security features. The slot supports 54 mm Express cards.

NOTE: The ExpressCard slot is designed only for ExpressCards. The slot does NOT support PC Cards.

- 2 **Audio connectors (3)** — Connects to speakers, headphones, and microphone.

NOTE: For information on audio connectors, see “Connecting External Speakers” on page 27.

- 3 **Optical drive** — Plays or records only standard-size (12 cm) CDs, DVDs, and Blu-ray Discs (optional). Ensure that the side with print or writing is facing upward when inserting discs. For more information, see “Using the Optical Drive” on page 33.

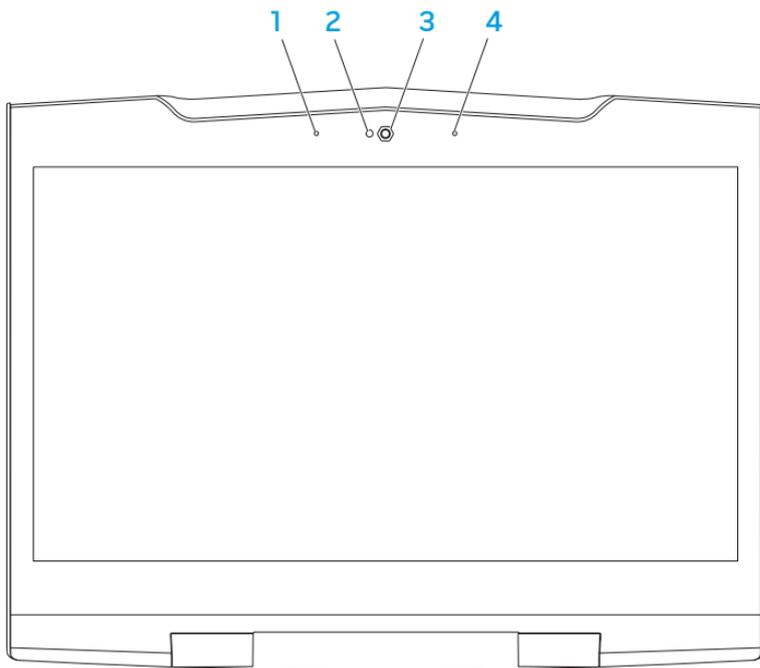
- 4  **USB/eSATA combo connector with USB PowerShare** — Connects to eSATA compatible storage devices (such as external hard drives or optical drives) or USB devices (such as a mouse, keyboard, printer, external drive, or MP3 player).

The USB Powershare feature allows you to charge USB devices when the computer is turned off or in standby mode. If you turn off your computer while charging a USB device, the device will stop charging. To continue charging, disconnect the USB device and connect it again.

NOTE: Certain USB devices may not charge when the computer is turned off or in standby mode. In such cases turn on the computer to charge the device.

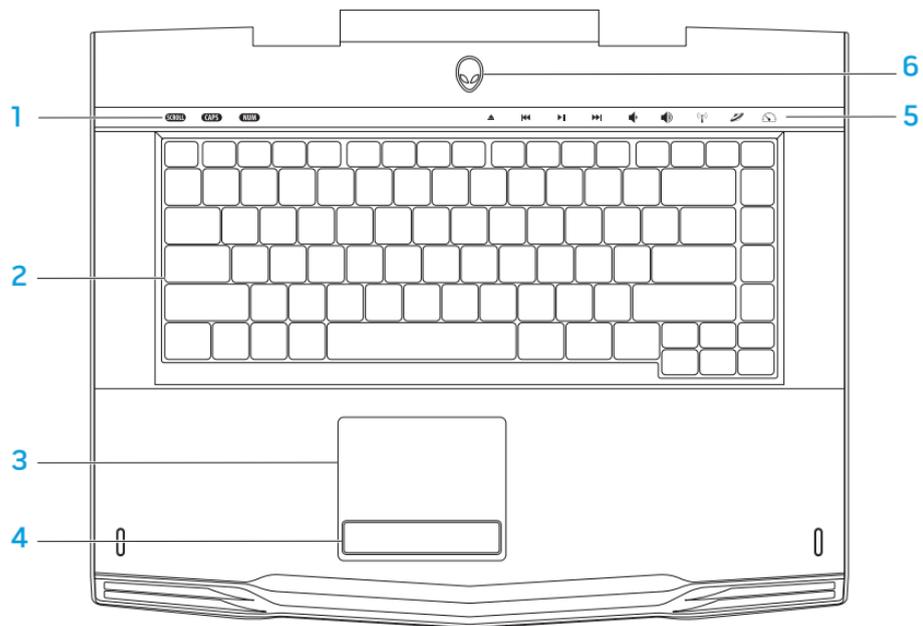
- 5  **USB connector** — Connects to USB devices, such as a mouse, keyboard, printer, external drive, or MP3 player.

Display Features



- 1 **Left digital array microphone** — Combines with the right digital array microphone to provide high quality sound for video chatting and voice recording.
- 2 **Camera activity indicator** — Indicates if the camera is on or off.
- 3 **Camera** — Built-in camera for video capture, conferencing, and chat.
- 4 **Right digital array microphone** — Combines with the left digital array microphone to provide high quality sound for video chatting and voice recording.

Computer Base and Keyboard Features



- 1 Status lights (3)** — Indicates if the Scroll Lock, Caps Lock, or Number Lock lights are turned on or off.
- 2 Keyboard** — The backlit keyboard provides visibility in dark environments by illuminating all symbols on the keys.
- 3 Touch pad** — Provides the functionality of a mouse to move the cursor, drag or move selected items, and left-click by tapping the surface.
- 4 Touch pad buttons (2)** — Provide left- and right-click functions like those on a mouse.
- 5 Touch controls (9)** — Touching the touch controls perform the associated action. For more information, see “Touch Controls” on page 19.
- 6 Power button** — Turns the computer on or off when pressed. For more information, see “Power Button” on page 20.

Status Lights

The three status lights are located at the top-left side of the keyboard. For the exact location, see “Computer Base and Keyboard Features” on page 18.

SCROLL

Scroll Lock Light

Turns on when the scroll lock option is on.

CAPS

Caps Lock Light

Turns on when the keyboard is in Caps Lock mode. In this mode, all characters you type are in uppercase.

NUM

Number Lock Light

Turns on when the keyboard is in Num Lock mode. In this mode, the embedded numeric keypads can be used.

Touch Controls

The touch controls are located at the top of the keyboard. For the exact location, see “Computer Base and Keyboard Features” on page 18. To activate, gently touch the desired control. The control will illuminate temporarily to confirm your selection.



Eject



Increase volume



Rewind or Play previous track



Wireless Control - Switch wireless communications on/off

(for more information, see “Using the Wireless Control” on page 33)



Play or Pause



Alienware Command Center

(for more information, see “Alienware Command Center” on page 32)



Fast Forward or Play next track



Stealth Mode - Switch computer to low power state

(for more information, see “Stealth Mode” on page 32)



Decrease volume

Power Button

You can program this button to perform actions like shutting down the operating system or entering the standby mode. For details on how to program this button, see **Power Options** in the Control Panel of Microsoft® Windows® operating system.

The power button is located in the center of the hinge cover. For the exact location, see “Computer Base and Keyboard Features” on page 18.

The color of the AlienHead rim indicates the power status. The color indicating the power status can be changed through the AlienFX® software.



On AC adapter:

Blue or custom AC-color

The battery is fully charged.

Blue or custom AC-color fading into white or custom battery-color

The computer is turned off or on and the battery is charging.

Blue or custom AC-color fading into black

The computer is in standby mode.

On battery:

Amber or custom battery-color

The battery is fully charged.

Amber or custom battery-color fading into black

The computer is in standby mode.

Blinking Amber or custom battery-color

The battery charge is low.

For more details on standby and hibernate mode, see the **Power Options** in the Control Panel of your Microsoft Windows operating system.

Function Keys



NOTE: Depending on the configuration of the laptop you purchased, some of the function keys may have no associated tasks.

The <Fn> key is located near the bottom-left corner of the keyboard, and is used together with other keys to activate certain functions. Hold down the <Fn> key along with the key described below:



F1 – Suspend Mode

Press <Fn><F1> to enable suspend mode. In the suspend mode, the display and selected devices will switch off for less energy consumption.



F2 – Check Battery Status and Battery Charge Disable/Enable

Press <Fn><F2> to toggle between the Battery Status Meter, Battery Charge Disable feature, and Battery Charge Enable feature.



F3 – Mute on/off

Press <Fn><F3> to enable or disable the mute function.



F4 – Increase Display Brightness

Press <Fn><F4> to increase the brightness of the display.



F5 – Decrease Display Brightness

Press <Fn><F5> to decrease the brightness of the display.



F6 – Extend Desktop

Press <Fn><F6> to switch between the various external display options available either simultaneously or separately.



F9 – Camera on/off

Press <Fn><F9> to switch off or switch on the camera.



F10 – Microsoft Mobility Center on/off

Press <Fn><F10> to launch or close the Microsoft Mobility Center application.



F11 – AlienFX® on/off

Press <Fn><F11> to disable or enable the AlienFX illumination.



F12 – Touch Pad on/off

Press <Fn><F12> to enable or disable the touch pad function and the illumination around the touch pad. When the touch pad function is switched off, the touch pad can still work temporarily for three to five seconds while the computer reboots into the Windows® operating system, or resumes from standby or hibernate mode.

Battery Pack

Your laptop is equipped with a high-energy rechargeable lithium ion (Li-ion) battery pack. Battery life will vary depending on your laptop configuration, model, applications installed, power management settings, and features used. As with all batteries, the maximum capacity of this battery will decrease with time and usage.

The battery meter lights on the battery pack indicate the charge level of the battery. When you press the battery meter once, the charge level lights illuminate. Each of the five lights represent approximately 20% of the total battery charge. For example, if four lights turn on, there is 80% of battery charge remaining and if no lights turn on, there is no charge remaining in the battery.

Recharging the Battery Pack

Your laptop supports both on-line and off-line recharge. Follow the procedure below to recharge battery:

- Ensure the battery pack is installed in the laptop.
- Connect the AC adapter to the laptop and to an electrical outlet.

The power button light indicates the power and battery status. For details on the power button light, see “Power Button” on page 20. When the laptop is OFF, a depleted Li-ion battery will take three hours to recharge.

Battery Maintenance

To maintain the battery pack's maximum capacity, you should occasionally let the laptop deplete its battery power completely before recharging.

To carry out a complete depletion of the battery, disconnect the AC adapter and let your laptop consume the remaining battery power. To speed up the depletion, use the hard drive as much as possible and set the display as bright as possible. When the battery is depleted or fully discharged, wait for the laptop to cool down (especially the battery). The temperature should be within 15°-25°C (59°-77°F). Then connect the AC adapter to recharge the battery.

Frequently Asked Questions

Q: I can feel a mild heat next to the battery pack. Is this normal?

A: The battery will generate heat during recharging and discharging. There is a protection circuit inside the laptop to prevent overheating. You do not need to worry.

Q: My battery operation time is not as long as it should be. Why?

A: The battery is heat sensitive and can only be charged to its maximum if the battery and its environmental temperature remain within 15°-25°C (59°-77°F). The more the temperature deviates from this range during recharging, the less chance there is for the battery to be fully charged. In order to recharge the pack to its full capacity, allow the battery to cool down by disconnecting the AC adapter. Then connect the AC adapter to start recharging again.

Q: I did not use my spare battery for a few days. Even though it was fully recharged, there wasn't as much power left as a newly charged one. Why?

A: The batteries will self-discharge (1% per day for Li-ion) when they are not being recharged. To ensure a battery is fully charged, recharge before use. Always keep the battery inside the laptop and have the AC adapter connected whenever possible.

Q: I did not use my spare battery for months. I am having a problem recharging it.

A: If you happen to leave your battery to go through an extended period of self-discharge, say more than three months, the battery voltage level will become too low. The battery then needs to be pre-charged (to bring the battery voltage level high enough) before it automatically (for Li-ion only) resumes its normal fast charge. Pre-charge may take 30 minutes. Fast charge usually takes 2-3 hours.

Power Management

Understanding Power Consumption

In order to fully utilize the power of your battery, it would be a good idea for you to spend some time acquiring a basic understanding of the power management concept from your operating system.

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

- **Balanced** — Offers full performance when you need it and saves power during periods of inactivity.
- **Power Saver** — 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** — Provides the highest level of system performance on your computer by adapting processor speed to your activity and by maximizing system performance.

Customizing Your Power Settings:

Windows Vista®

1. Click **Start**  → **Control Panel**.
2. Click **Classic View** from the task panel.
3. Double-click the **Power Options** icon.
4. Select a power plan from the options shown. To customize specific settings, click **Change plan settings** beneath the selected power plan.

Windows® 7

1. Click **Start**  → **Control Panel**.
2. Click **All Control Panel Items**.
3. Double-click the **Power Options** icon.
4. Select a power plan from the options shown. To customize specific settings, click **Change plan settings** next to the selected power plan.

Reducing Power Consumption

Although your laptop (together with the operating system) is capable of power conservation, there are measures you can take to reduce the power consumption:

- Use the AC power whenever possible.
- Lower the intensity of the display backlight. A very bright screen translates to higher power usage.
- Switch to the Stealth mode to activate additional system power savings. Switching into and out of Stealth mode may require a reboot depending on your computer configuration and the operating system.



NOTE: The battery pack should be locked in the battery compartment all the time.



CHAPTER 3: CONNECTING DEVICES

This chapter provides information about connecting optional devices to your laptop to enhance your audio, visual, and digital experience.

Connecting External Displays

If you want to enjoy your computing environment on a bigger scale visually, or extend your desktop area, you can connect an external display such as a standalone monitor, an LCD TV, or a projector.

Connecting a Display

For the best picture quality, use the DisplayPort on your computer. If your display does not have a DisplayPort, you can connect to the display using either a VGA cable from the laptop's 15-pin VGA connector or a DVI cable using a DisplayPort-to-DVI adapter. This adapter can be purchased through Alienware, Dell, or other electronics retailers.

1. Turn off your laptop.
2. Turn off the display and disconnect it from the power supply.
3. Connect one end of the display cable to the DisplayPort or VGA connector on your Alienware laptop.
4. Connect the other end of the cable to the same connector on your display.
5. If you are using a DisplayPort-to-DVI adapter, first connect this adapter to the DisplayPort connector on your Alienware laptop and then connect a DVI cable to the DVI connector on the adapter and tighten the screws. Connect the other end of the DVI cable to the DVI connector on your display.

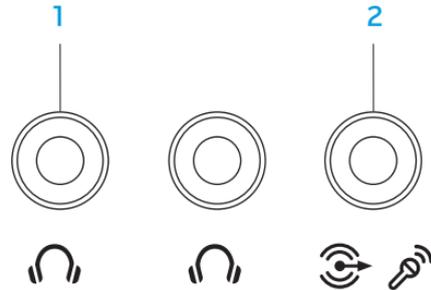
6. If necessary, connect one end of the power cable to the display's power connector.
7. Connect the other end of the power cable to a grounded three-prong power strip or wall outlet.
8. Turn on your laptop, and then turn on your display.

Extending the Desktop

1. With the external display connected, right-click on the desktop and select **Personalize**.
2. Select **Connect to a projector or other external display** in the upper left portion of the screen.
3. Click **Connect Display**.
4. Select from the below options that appear on the screen:
 - **Duplicate my display on all displays (mirrored)**
 - **Show different parts of my desktop on each display (extended)**
 - **Show my desktop on the external display only**
5. Click **Apply** to apply your changes and then click **OK** to exit the Display Settings control panel.

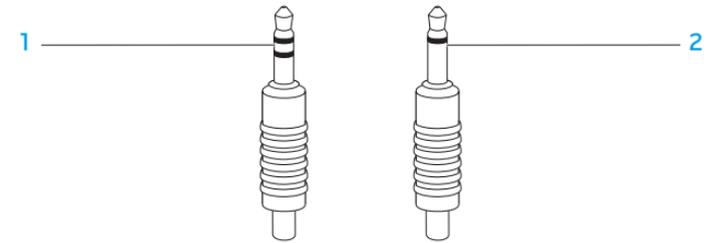
Connecting External Speakers

Your Alienware laptop has two integrated audio out connectors and one audio in connector. The audio out connectors deliver quality sound and support 5.1 surround audio. You can connect the audio input connector from a home stereo or speaker system for a heightened gaming and media experience.



- 1  **Audio out/Headphone connectors (2)** — Connects to one or two pairs of headphones, or sends audio to a powered speaker or sound system. The audio signal is the same for both connectors.
- 2  **Audio in/Microphone connector** — Connects to a microphone or inputs signal for use with audio programs. Also functions as an output connector in a 5.1 surround sound speaker setup.

Two types of audio connectors:



- 1 **stereo jack** — Your headphone jack should have this type of connector
- 2 **mono jack** — Your microphone should have this type of connector

Connecting Printers

Connecting a Plug and Play Printer

If your printer supports plug and play, Microsoft Windows will detect it and attempt to install the printer automatically. In some cases, Windows may require a driver for the printer. This driver is located on the software CD that is included with the printer.

1. Connect the printer's USB cable to an available USB connector on your laptop.
2. Connect the printer's power cable to a grounded, three-prong power-strip, uninterruptible power supply, or wall outlet.
3. Turn on the printer and Microsoft Windows will automatically detect the printer and install the appropriate driver.

Connecting a Non Plug and Play Printer

Windows Vista®

1. Click **Start**  → **Control Panel**.
2. Click **Hardware and Sound** → **Add a printer**.
3. Follow the instructions on the screen.

Windows® 7

1. Click **Start**  → **Control Panel**.
2. Click **Hardware and Sound** → **Devices and Printers** → **Add a printer**.
3. Follow the instructions on the screen.

For more information, see the documentation that shipped with your printer.

Connecting USB Devices

Connect USB devices into an available USB connector on your laptop. Microsoft Windows will detect the device and attempt to install the appropriate driver automatically. In some cases, Windows may require a driver. This driver is located on the software CD that is included with the device.

If your keyboard or mouse uses a USB connection, connect its USB connector into an available USB connector on the laptop.

The USB/eSATA combo connector with USB PowerShare feature can connect to eSATA compatible devices and USB devices. This connector can also be used for charging USB devices when the computer is on/off or in standby mode.

The USB PowerShare feature is enabled in the BIOS setup by default. When the laptop is on battery mode, you can disable the feature through the **Advanced Menu** in BIOS (for more information, see “Entering System Setup” on page 34).

Connecting FireWire (IEEE 1394) Devices

Connect the FireWire device into the IEEE 1394 A connector on your laptop. Windows will detect the device and attempt to install the appropriate driver automatically. In some cases, Windows may require a driver. This driver is located on the software CD that is included with the device.

For more information, see the documentation that shipped with the device.

~XVCXOI @: GAXC/ AGCI EVCA3C

CHAPTER 4: USING YOUR LAPTOP

Alienware Command Center

The Alienware® Command Center gives you access to Alienware's exclusive software and is a continuously upgradable control panel. As Alienware releases new programs, they download directly into the Command Center allowing you to build a library of system management, optimization, and customization tools. You can access Alienware Command Center by gently touching the touch control located near the top of the keyboard. The control will illuminate temporarily to confirm your selection. For the exact location of the control, see "Computer Base and Keyboard Features" on page 18.

Stealth Mode

Stealth mode is designed to reduce the processor and graphics utilization and thereby reduces the energy consumption and noise level of your computer. Stealth mode helps you to use a 65 W auto/air adapter.

You can access Stealth mode by gently touching the touch control located near the top of the keyboard. The control will illuminate to full brightness until the function is deactivated. For the exact location of the control, see "Computer Base and Keyboard Features" on page 18.

Using Removable Media and Cards

Observe the safety measures below:

When no ExpressCard or media card (SD/MMC/MS cards) is inserted into the ExpressCard or media card slot, ensure that the blank cards that shipped with your laptop is inserted in the unused slot(s). The blank cards protect the unused slots from dust and other particles. When inserting a blank card, ensure that the correct side is on the top (indicated by an arrow mark on some blank cards). Inserting a blank card upside down may damage your laptop.

Using the Optical Drive

Your laptop has a slot load optical drive. Depending on the configuration ordered, your laptop may have one of the following drive types. These logos are used to indicate each drive's capabilities and media compatibility.

DVD±R/W Dual
Layer Writer



DVD±R/W drive can read CD-ROM, CD-R, CD-R/W, DVD, DVD+R/W, and DVD-R/W media.

It can also record to CD-R, CD-RW, DVD+R/W, DVD-R/W, and DVD+R Dual Layer (DL) media.

Blu-ray Disc™
Reader/Writer



Blu-ray drive can read CD-ROM, CD-R, CD-R/W, DVD, DVD+R/W, DVD-R/W, DVD+R Dual Layer (DL), BD-ROM, BD-R, and BD-RE media.

It can also record to CD-R, CD-R/W, DVD+R/W, DVD-R/W, DVD+R Dual Layer (DL), BD-R, and BD-RE media.

Using the Integrated Camera

Turning the Camera On and Off

Press the key combination <Fn><F9> to switch on or switch off the camera. After switching on the camera, you need to activate its function through the Microsoft Windows operating system. In addition, you can also use Windows Movie Maker to create, edit, and share videos.

Using the Wireless Control

The wireless control allows you to quickly turn all of your wireless radios (Bluetooth® and WLAN) off, such as when you are asked to disable all wireless radios on an airplane flight. Gently touching this control one time turns all of your radios off. Gently touching it again returns your wireless radios to their respective states they were in before you touched the control the first time.

Configuring the BIOS

System Setup

The System Setup options allow you to:

- Change the system configuration information after you add, change, or remove any hardware in your laptop.
- Set or change a user-selectable option.
- View the installed amount of memory or set the type of hard drive installed.

Before you use System Setup, it is recommended that you write down the current System Setup information for future reference.

 **CAUTION:** Do not change the settings in System Setup unless you are an expert computer user. Certain changes can cause your computer to work incorrectly.

Entering System Setup

1. Turn on (or restart) your laptop.
2. While the laptop is booting, press <F2> immediately before the operating system logo appears to access the **BIOS Setup Utility**. If an error occurs during POST (Power On Self Test), you may also enter the **BIOS Setup Utility** by pressing <F2> when prompted.



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 laptop and try again.



NOTE: Keyboard failure may result when a key on the keyboard is held down for extended periods of time. To avoid possible keyboard failure, press and release <F2> in even intervals until the System Setup screen appears.

System Setup Screens

The **BIOS Setup Utility** window displays current or changeable configuration information for your laptop. Information is divided into five menus: **Main**, **Advanced**, **Security**, **Boot**, and **Exit**.

Key functions appear at the bottom of the **BIOS Setup Utility** window and lists keys and their functions within the active field.

System Setup Options



NOTE: Depending on your computer and installed devices, the items listed in this section may not appear, or may not appear exactly as listed.



NOTE: For the updated system setup information, see the *Service Manual* on the Dell Support website at support.dell.com/manuals.

Main Menu

System Time	Displays the system time.
System Date	Displays the system date.
Alienware	Displays the model number of your computer.
Service Tag	Displays the service tag of your computer.
BIOS Version	Displays the BIOS revision.
EC Version	Displays the EC firmware version.
CPU	Displays the type of processor.
CPU Speed	Displays the speed of the processor.
CPU Cache	Displays the processor cache size.
CPU ID	Displays the ID of the processor.

Main Menu

Total Memory	Displays the total memory available in your computer.
Memory Bank 0	Displays the memory size installed in memory bank 0.
Memory Bank 1	Displays the memory size installed in memory bank 1.

Advanced Menu

Summary Screen	Allows you to enable or disable the diagnostic screen during boot.
Intel® Virtualization Technology	Allows you to enable or disable the virtualization technology. This option specifies whether a Virtual Machine Monitor (VMM) can utilize the additional hardware capabilities provided by Intel Virtualization Technology.
Intel Speed Step	Allows you to enable or disable the Intel Speed Step technology. Disabling this feature may improve performance, but will greatly reduce battery life.
Wired Network	Allows you to enable or disable the on-board LAN controller. <ul style="list-style-type: none">• Disabled: Internal LAN is off and is not visible to the operating system.• Enabled: Internal LAN is enabled.

Advanced Menu

Wireless Network	<p>Allows you to enable or disable the internal wireless device.</p> <ul style="list-style-type: none">▪ Disabled: The internal wireless device is off and is not visible to the operating system.▪ Enabled: The internal wireless device is enabled.
Bluetooth Receiver	<p>Allows you to enable or disable the internal Bluetooth device.</p> <ul style="list-style-type: none">▪ Disabled: The internal Bluetooth device is off and is not visible to the operating system.▪ Enabled: The internal Bluetooth device is enabled.
High Definition Sound	<p>Allows you to enable or disable the internal high definition audio device.</p> <ul style="list-style-type: none">▪ Disabled: The internal audio device is off and is not visible to the operating system.▪ Enabled: The internal audio device is enabled.
USB Emulation	<p>Allows you to enable or disable the USB emulation feature. This feature defines how the BIOS, in the absence of a USB-aware operating system, handles USB devices. USB emulation is always enabled during POST (Power On Self Test).</p> <p>NOTE: You cannot boot any type of USB device (floppy, hard drive, or memory key) when this option is off.</p>

Advanced Menu

SATA Operation	<p>Allows you to configure the operating mode of the integrated SATA hard drive controller.</p> <ul style="list-style-type: none">▪ ATA: SATA is configured for ATA mode.▪ AHCI: SATA is configured for AHCI mode.
Firewire/Express Slot	<p>Allows you to enable or disable the IEEE 1394 A connector and Express Card slot.</p> <ul style="list-style-type: none">▪ Disabled: The IEEE 1394 A connector and Express Card slot are off and are not visible to the operating system.▪ Enabled: The IEEE 1394 A connector and Express Card slot are enabled.
eSATA	<p>Allows you to enable or disable the eSATA connector.</p> <ul style="list-style-type: none">▪ Disabled: The eSATA connector is off and is not visible to the operating system.▪ Enabled: The eSATA connector is enabled.
SATA Hard Drive	<p>Displays the installed SATA hard drive model.</p>
SATA Optical Drive	<p>Displays the installed SATA optical drive model.</p>

Performance Options Sub-Menu

CPU Speed	<p>Displays the speed of the processor.</p>
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Performance Options Sub-Menu

Memory Frequency	Displays the frequency of the memory.
Memory Channel Mode	Displays the memory channel modes. <ul style="list-style-type: none">• Single• Dual
CPU Performance Mode	Indicates if the processor is in turbo mode or not.
Turbo Mode	Allows you to enable or disable the turbo mode.
Select Clock Mode	Allows you to choose the FSB-memory system clock mode. <ul style="list-style-type: none">• Auto• Unlinked
Memory Frequency	Allows you to set the memory frequency. Note: The memory frequency option appears only if the clock mode is set to unlinked.
DDR3 Voltage	Allows you to enter the memory voltage.

Security Menu

System Password Status	Displays if the supervisor password is clear or set.
Set System Password	Allows you to set the supervisor password. The supervisor password controls access to the system setup utility.
User Password Status	Displays if the user password is clear or set.
Set User Password	Allows you to set the user password. The user password controls access to the computer at boot.
Enable Password on Boot	Allows you to enable or disable password entry on boot.
Asset Tag	Displays the asset tag.

Security Menu

Computrace® Allows you to activate or disable the BIOS module interface of the optional Computrace® Service from Absolute® Software.

The Computrace® agent from Absolute® Software is a service solution designed to help track assets and provide recovery services in the event the computer is lost or stolen. The Computrace® agent communicates with the Absolute® software Monitoring Server at programmed intervals to provide the tracking service. By activating the service, you consent to the transmission of information from and to your computer and the Absolute® Software Monitoring Server. The Computrace® service is purchased as an option and the monitoring Server will enable its agent security module through an interface provided by the BIOS.

- Deactivate: the Computrace® module interface is not active.
- Disable: permanently block the Computrace® module interface.
- Activate: permit the Computrace® module interface.

The Absolute® Anti-Theft solution is presently Deactivated. Note that the activate or disable options will permanently activate or disable the feature and no further changes will be allowed.

Power Menu

A/C Adapter Rating Displays the AC adapter rating.

A/C Adapter Warnings Allows you to choose if the computer should display warning messages when you use certain power adapters. The computer displays these messages if you attempt to use a power adapter that has too little capacity for your configuration.

USB Wake Support Allows you to enable USB devices to wake the computer from standby or to disable the USB wake support feature.

USB Power Share Allows you to enable or disable the USB PowerShare feature. This feature is intended to allow users to charge external devices using the stored battery power through the USB PowerShare connector on the laptop, even while the laptop is turned off.

Boot Menu

1st Boot Device Allows you to set the first boot device.

2nd Boot Device Allows you to set the second boot device.

3rd Boot Device Allows you to set the third boot device.

4th Boot Device Allows you to set the fourth boot device.

Exit Menu

Exit Saving Changes	Allows you to exit System Setup and save your changes to CMOS.
Exit Discarding Changes	Allows you to exit utility without saving Setup data to CMOS.
Load Setup Defaults	Allows you to load default values for all Setup items.
Discard Changes	Allows you to load previous values from CMOS for all Setup items.
Save Changes	Allows you to save Setup data to CMOS.

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עַל כָּל הַמַּעֲשֵׂי שֶׁעָשִׂיתָ

CHAPTER 5: INSTALLING ADDITIONAL OR REPLACEMENT COMPONENTS

This chapter provides guidelines and instructions for increasing the processing power and storage space, by upgrading equipment. You can purchase components for your computer at www.dell.com or www.alienware.com.



NOTE: See the *Service Manual* at the Dell™ Support website, support.dell.com/manuals for installation instructions of all serviceable components. Parts purchased from Dell and Alienware will ship with specific replacement instructions.

Before You Begin

This section provides procedures for removing and installing the components in your laptop. Unless otherwise noted, each procedure assumes that the following conditions exist:

- You have performed the steps in “Turning Off Your Computer” and “Before Working Inside Your Computer” in this section.
- You have read the safety information that shipped with your computer.
- A component can be replaced or—if purchased separately—installed by performing the removal procedure in reverse order.

Turning Off Your Computer



CAUTION: To avoid losing data, save and close all open files and exit all open programs before you turn off your laptop.

1. Save and close all open files and exit all open programs.
2. Click **Start**  → **Shut Down**.
The laptop turns off after the operating system shutdown process finishes.
3. Ensure that the computer and any attached devices are turned off. If your computer and attached devices did not automatically turn off when you shut down your operating system, press and hold the power button for at least 8 to 10 seconds until the computer turns off.

Before Working Inside Your Computer

Use the following safety guidelines to help protect your computer from potential damage and to help to ensure your own personal safety.



WARNING: Before working inside your laptop, 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.



CAUTION: Handle components and cards with care. Do not touch the components or contacts on a card. Hold a card by its edges. Hold a component such as a processor by its edges, not by its pins.



CAUTION: Only a certified service technician should perform repairs on your computer. Damage due to servicing that is not authorized by Dell is not covered by your warranty.



CAUTION: To avoid electrostatic discharge, ground yourself by using a wrist grounding strap or by periodically touching an unpainted metal surface (such as a connector on the back of the computer).



CAUTION: When you disconnect a cable, pull on its connector or on its pull-tab, not on the cable itself. Some cables have connectors with locking tabs; if you are disconnecting this type of cable, press in on the locking tabs before you disconnect the cable. As you pull connectors apart, keep them evenly aligned to avoid bending any connector pins. Also, before you connect a cable, ensure that both connectors are correctly oriented and aligned.



CAUTION: To avoid damaging the computer, perform the following steps before you begin working inside the computer.

1. Ensure that the work surface is flat and clean to prevent the computer cover from being scratched.
2. Turn off your computer (for more information, see “Turning Off Your Computer” on page 42).
3. If the laptop is connected to a docking device (docked), undock it. See the documentation that came with your docking device for instructions.



CAUTION: To disconnect a network cable, first unplug the cable from your computer and then unplug the cable from the network device.

4. Disconnect all telephone or network cables from the laptop.
5. Press and eject any installed cards from the ExpressCard slot and the Media Card slot.
6. Disconnect your computer and all attached devices from their electrical outlets.



CAUTION: To help prevent damage to the system board, you must remove the battery from the battery bay before you service the laptop.

7. Remove the battery from the battery bay (for more information, see “Replacing the Battery Pack” on page 44).
8. Press the power button to ground the system board.

Replacing the Battery Pack

This battery pack can easily be removed and replaced. Ensure that the laptop is properly shut down before changing the battery pack.

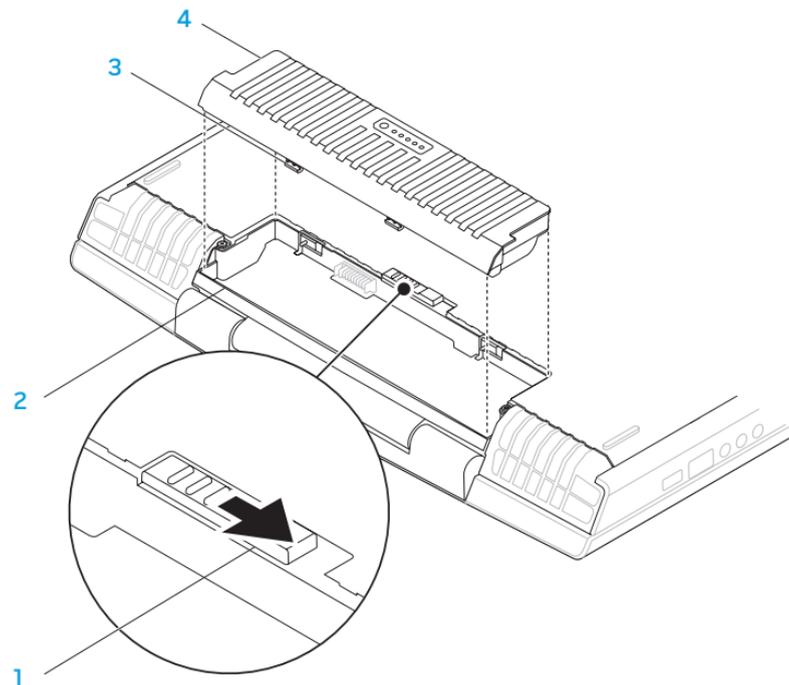
CAUTION: To avoid damage to the laptop, use only the battery designed for this particular Alienware laptop. Do not use batteries designed for other Alienware or Dell laptops.

To remove the battery pack:

1. Shut down the laptop.
2. Turn the laptop over.
3. Slide the battery latch to the unlock position as shown.
4. The battery pack will pop up.
5. Remove the battery pack.

To replace the battery pack:

1. Align the two battery pack tabs with the slots in the battery bay.
2. Push the battery pack into the battery bay until the battery pack clicks into place.



1 battery latch
2 battery bay

3 battery pack tabs (2)
4 battery pack

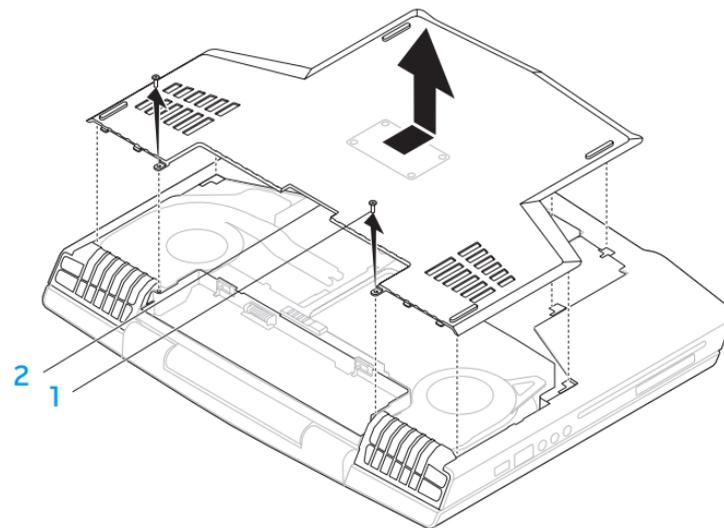
Upgrading or Replacing Memory

Your laptop is equipped with a configurable memory unit. The industry standard JEDEC PC3-8500/PC3-10600 (DDR3) SODIMM memory module connectors are available for memory upgrade. The table below illustrates all the possible ways system memory can be configured.

Memory connector #1	Memory connector #2	Total Memory
1 GB	1 GB	2 GB
2 GB	1 GB	3 GB
1 GB	2 GB	3 GB
2 GB	2 GB	4 GB
4 GB	4 GB	8 GB

Removing the Memory Module(s)

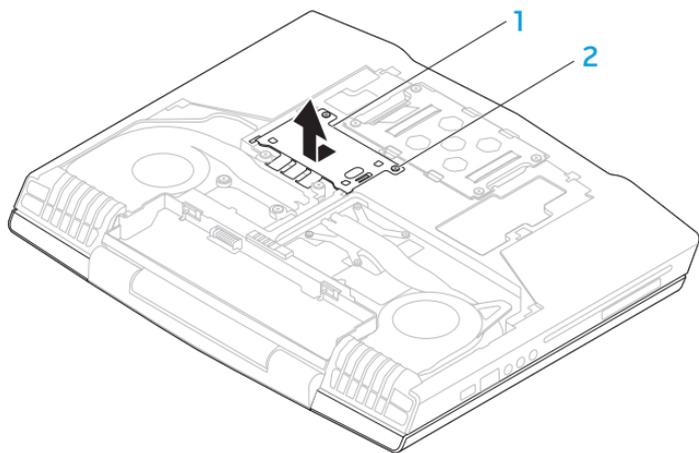
1. Follow the instructions in “Before You Begin” on page 42.
2. Loosen the two screws and remove the compartment door.



1 screws (2)

2 compartment door

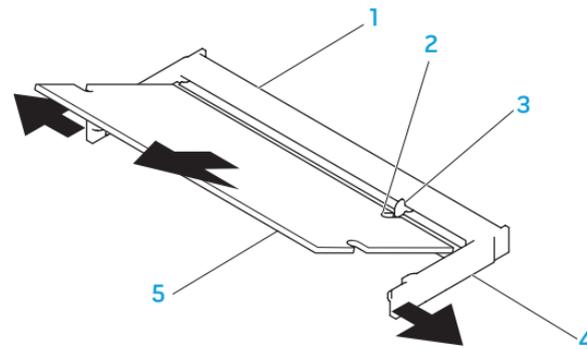
- Loosen the two captive screws and remove the memory module door.



1 memory module door

2 captive screws (2)

- Use your fingertips to carefully spread apart the memory module connector's spring-locks until the module pops up.
- Remove the memory module.



1 memory module connector

2 notch

3 tab

4 spring locks (2)

5 memory module

To replace the memory modules, perform the removal steps in reverse order. While inserting the memory module into the connector align the notch on the memory module to the tab on the memory module connector.



NOTE: Install the memory module first in the bottom connector and then in the top connector.



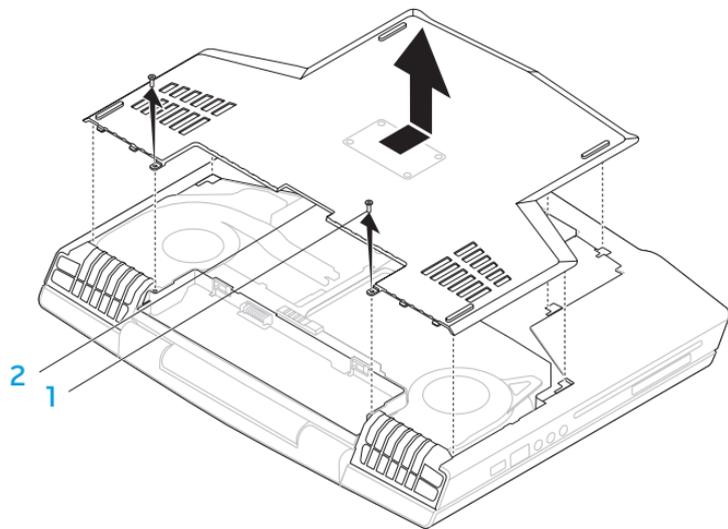
NOTE: If the memory module is not installed properly, the computer may not boot.

Upgrading or Replacing the Hard Drive

Your laptop is equipped with one hard drive socket.

Removing the Hard Drive

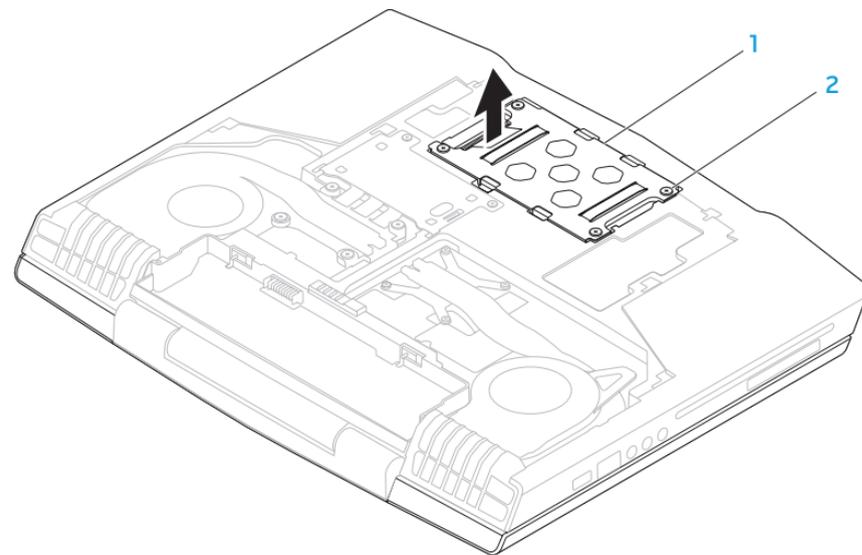
1. Follow the instructions in “Before You Begin” on page 42.
2. Loosen the two screws and remove the compartment door.



1 screws (2)

2 compartment door

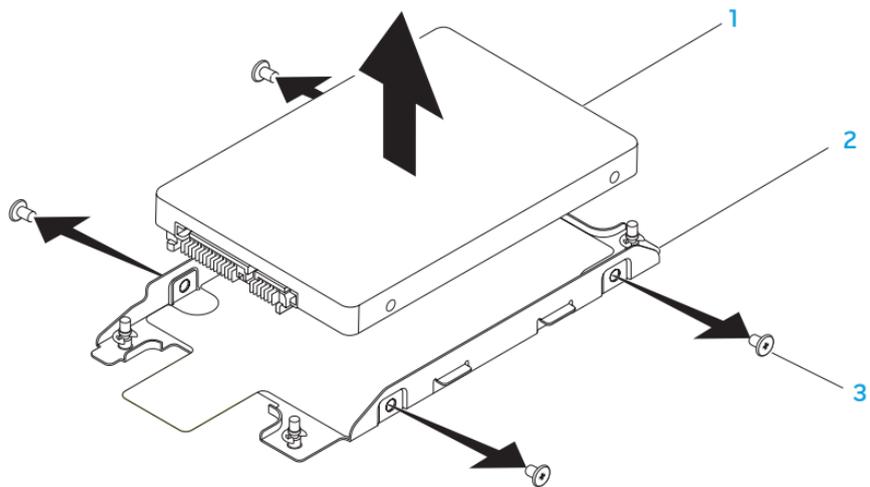
3. Loosen the four captive screws on the hard drive.
4. Lift the hard drive out.



1 hard drive

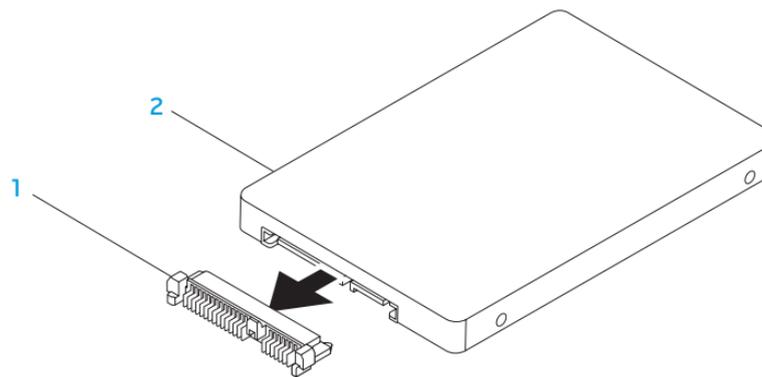
2 captive screws (4)

- Remove the four screws that secure the hard drive to the hard drive bracket.
- Lift the hard drive out of the hard drive bracket.
- Remove the interposer from the hard drive.



1 hard drive
2 hard drive bracket

3 screws (4)



1 interposer

2 hard drive

To replace the hard drive, perform the removal steps in reverse order.

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CHAPTER 6: TROUBLESHOOTING

Basic Hints and Tips

- Computer does not power on: Is your AC adapter securely connected to a working electrical outlet? If connected to a power strip, ensure that the strip is actually working.
- Connections: Check all the cables to ensure that there are no loose connections anywhere.
- Power Savings: Ensure that your computer is not in hibernate or standby mode by pressing the power button for less than 4 seconds. The power status light will fade from blue to black while in standby mode; in hibernate mode it will be off.
- Brightness: Check and adjust the brightness of the display by pressing the key combinations <Fn><F4> or <Fn><F5>.
- Display Choice: Press the key combination <Fn><F6> to ensure that the computer is not set to “External Only” display.
- Use only the AC adapter that shipped with your laptop.

Backup and General Maintenance

- Always backup your important data on a regular basis and keep copies of your operating system and software safe. Do not forget to note the serial numbers if you are storing them outside of their original cases - e.g., in a CD wallet.
- Run maintenance programs as often as you can. You may schedule these programs to run at times when you are not using your computer. You can use those provided with your operating system, or buy more powerful, dedicated programs to do so.
- Write down your passwords and keep them safe (away from your computer). This is especially important if you choose to password-protect your computer's BIOS and operating system.
- Document vital settings such as network, dialup, mail and Internet settings.

When troubleshooting your computer, remember the following safety guidelines:

- Before touching any of the computer's internal components, touch an unpainted portion of the chassis. Doing so will safely discharge any static electricity, which could damage your computer.
- Turn off your computer and any connected peripherals.
- Disconnect any peripherals from your computer.

Things to check before troubleshooting:

- Ensure that the AC adapter cable is properly connected between your computer and a grounded, three-prong power outlet. Ensure that the power outlet is working.
- Ensure the UPS or power strip is turned on (if applicable).
- If your peripheral devices (e.g. keyboard, mouse, printer, etc.) are not working, ensure that all connections are secure.
- If any computer components were added or removed before the problem began, check to see if you performed the installation or removal procedures properly.
- If an error message appears on the screen, write down the exact error message prior to calling Alienware Technical Support to aid in diagnosing and resolving your issue.
- If an error occurs in a specific program, see the program's documentation.

Software Diagnostic Tools

Pre-Boot System Assessment (PSA)

The computer runs the Pre-boot System Assessment (PSA), a series of initial tests of your system board, keyboard, display, memory, hard drive, etc.

To invoke PSA:

1. Turn on (or restart) your computer.
2. Press <F12> to access the **Boot Menu**.
3. Select **Diagnostics** from the menu and press <Enter>.

During the assessment, answer any questions that appear.

- If a failure is detected, the computer stops and beeps. To stop the assessment and restart the computer, press <n>; to continue to the next test, press <y>; to retest the component that failed, press <r>.
- If failures are detected during the Pre-boot System Assessment, write down the error code(s) and contact Alienware (for more information, see "CONTACTING ALIENWARE" on page 73).

If the Pre-boot System Assessment completes successfully, the following message appears "Do you want to run the remaining memory tests? This will take about 30 minutes or more. Do you want to continue? (Recommended) ."

If you are experiencing memory issues, press <y> else press <n>. The following message is displayed: "Pre-boot System Assessment complete."

Press <o> to reboot your computer.

Alienware® Diagnostics

If you experience a problem with your Alienware laptop, run the Alienware Diagnostics before you contact Alienware for technical assistance. It is recommended that you print these procedures before you begin.

 **NOTE:** Back up all data before initiating a system recovery. Backup functionality is included in AlienRespawn™ v2.0, but as a precaution it would be better to backup critical files onto an external media before initiating recovery.

 **NOTE:** The Support disc contains drivers for your computer. You can also download the latest drivers and software for your computer from support.dell.com.

Review your laptop's configuration information, and ensure that the device that you want to test displays in the system setup program and is active. Start the Alienware Diagnostics from the Support disc.

Starting Alienware Diagnostics From the Support Disc

1. Insert the Support disc.
2. Shut down and restart the laptop.
When the Alienware 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 **Boot from CD-ROM** from the menu that appears and press <Enter>.
5. Select **Alienware Diagnostics** from the numbered list. If multiple versions are listed, select the version appropriate for your computer.
6. When the Alienware Diagnostics **Main Menu** appears, select the test you want to run.

NOTE: Write down any error codes and problem descriptions exactly as they appear and follow the instructions on the screen.

7. After all tests have completed, close the test window to return to the Alienware Diagnostics **Main Menu**.
8. Remove your Support disc, then close the **Main Menu** window to exit the Alienware Diagnostics and restart the computer.

Answers to Common Problems

CD-ROM, DVD-ROM, CD-R/W, DVD±R/W, or Blu-ray Disc™ Drive

The computer does not recognize the disc or drive

- Check to see if the disc is properly inserted into the drive with the label facing up.
- Try another disc.
- Shut down and restart the computer.
- Clean the disc.
- Restart the computer and enter the BIOS setup utility by pressing <F2> as the computer restarts.

Check the BIOS to ensure that the SATA controllers are enabled. Check the drive configuration to ensure it is properly configured; see the documentation that shipped with the drive.



WARNING: Before working inside your computer, 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.



CAUTION: Follow the instructions in “Before You Begin” on page 42 before working inside your computer.

- Shut down your computer, disconnect the power cable, and open your computer. Ensure that the cables are properly connected to the drive and the SATA connector on your system board. For more information, see the *Service Manual*.

An audio CD does not produce sound

- Check to see if the audio CD is properly inserted into the drive with the label facing up.
- Check the volume controls to ensure they are turned up.
- Ensure that the mute control is not enabled.
- Check the speaker cables to ensure they are properly connected to the connectors on your computer.
- Clean the CD.
- Shut down and restart your computer.
- Reinstall the audio device drivers.

A DVD or Blu-ray Disc movie does not play

- Shut down and restart your computer.
- Clean the disc.
- Reinstall the provided DVD or Blu-ray playback software.
- Try another disc. Some discs may have conflict with the drive if the encoding on the DVD or Blu-ray disc does not match the encoding recognized by the drive.

System

The computer fails the POST

The POST (Power On Self Test) tests the computer, ensuring that it meets the necessary system requirements and that all hardware is working properly before starting the remainder of the boot process. If the computer passes the POST, the computer will continue to start normally. However, if the computer fails the POST, the computer will generate a single beep to indicate a general failure and an error message will be displayed. For assistance, contact Alienware Technical Support (see “CONTACTING ALIENWARE” on page 73).

The computer stops responding or a solid blue screen appears

 **WARNING:** 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 6 seconds until the computer turns off, then restart your computer.

 **NOTE:** The chkdsk program may run when you restart the computer. Follow the instructions on the screen.

A program stops responding or crashes repeatedly

End the program:

1. Press <Ctrl><Shift><Esc> simultaneously.
2. Click the **Applications** tab and select the program that is no longer responding.
3. Click **End Task**.

Check the software documentation.

If necessary, uninstall and then reinstall the program.

A program is designed for an earlier version of Microsoft® Windows®

Run the Program Compatibility Wizard:

The **Program Compatibility Wizard** configures a program so that it runs in an environment similar to an earlier version of Microsoft Windows operating system environments.

Windows Vista®

1. Click **Start**  → **Control Panel** → **Programs** → **Use an older program with this version of Windows**.
2. In the welcome screen, click **Next**.
Follow the instructions on the screen.

Windows® 7

1. Click **Start**  → **Control Panel** → **Programs** → **Programs and Features** → **Use an older program with this version of Windows**.
2. In the welcome screen, click **Next**.
Follow the instructions on the screen.

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

Scan the computer for spyware:

If you are experiencing slow computer performance, you frequently receive pop-up advertisements, or you are having problems connecting to the Internet, your computer might be infected with spyware. Use an anti-virus program that includes anti-spyware protection (your program may require an upgrade) to scan the computer and remove spyware.

Run the PSA Diagnostics:

If all tests run successfully, the error condition is related to a software problem.

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.

Hard Drive Problems

Allow the computer to cool before turning it on

A hot hard drive may prevent the operating system from starting. Try allowing the computer to return to room temperature before turning it on.

Run Check Disk

1. Click **Start**  → **Computer**.
2. Right-click **Local Disk C:**
3. Click **Properties** → **Tools** → **Check Now**.
If the **User Account Control** window appears, click **Continue**.
Follow the instructions on the screen.

Internet

Cannot browse the Internet or the Unable to locate host error message appears:

- Check if you are connected to the Internet.
- Check if the web address typed in the address bar is correct and valid. Try a different Web address, or URL.
- If the error message still appears, disconnect from the Internet Service Provider (ISP) and close the browser. Reconnect and open the browser.
- If the problem persists, your ISP may be experiencing technical difficulties.

Internet connection is slow

Internet performance can be affected by the following factors:

- The condition of the telephone or network cables being used.
- The condition of the network equipment at your ISP.
- The graphics or multimedia on web pages.
- The multiple browsers, downloads, or programs open on your computer.

Keyboard

The keyboard is not responding

Clean the keyboard by using an aerosol can of compressed air with a proper extension to remove dust and lint trapped under the keys.

A keyboard character is repeating

- Ensure that there is nothing resting on any of the keys.
- Check that no key on the keyboard is stuck. Press each key to loosen any keys that may be stuck and then restart your computer.

Spills on the keyboard

If liquid of any kind is spilled on the keyboard, turn off the computer. Clean the keyboard using the appropriate cleaning materials and turn the computer over to drain the keyboard. Once the keyboard has dried, turn on the computer. If the keyboard does not work, it needs to be replaced.

Keyboards damaged due to spills are not covered under limited warranty.

Memory

Memory errors detected on startup

- Check memory modules for correct seating and orientation. Reseat the memory modules if applicable (see “Upgrading or Replacing Memory” on page 45).
- Computers using a dual-channel memory configuration require that memory modules be installed in pairs. If you require assistance, contact Alienware Technical Support (for more information, see “CONTACTING ALIENWARE” on page 73).

Display

If the display is blank



NOTE: If you are using a program that requires a higher resolution than your computer supports, it is recommended that you attach an external monitor to your computer.

The computer may be in a power saving mode:

Press a key on the keyboard or press the power button to resume normal operation.

Check the battery:

If you are using a battery to power your computer, the battery charge may be depleted. Connect the computer to an electrical outlet using the AC adapter, and then turn on the computer.

Check the AC adapter:

Check the AC adapter cable connections and ensure that the light is on.

Test the electrical outlet:

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

Switch the video image:

If your computer is attached to an external monitor, press <Fn><F6> to switch the video image to the display.

If the display is difficult to read

Adjust the brightness:

Press <Fn><F4> to increase brightness or <Fn><F5> to decrease brightness.

Adjust the Windows display settings:

Windows Vista®

1. Click **Start**  → **Control Panel** → **Hardware and Software** → **Personalization** → **Display Settings**.
2. Adjust **Resolution** and **Colors settings**, as needed.

Windows® 7

1. Click **Start**  → **Control Panel** → **Appearance and Personalization** → **Display**.
2. Adjust **Resolution** and **Calibrate color**, as needed.

Connect an external monitor:

1. Shut down your computer and connect an external monitor to the computer.
2. Turn on the computer and the monitor, and then adjust the monitor brightness and contrast controls.

If the external monitor works, the computer display or video controller may be defective. Contact Alienware support (see “CONTACTING ALIENWARE” on page 73).

Mouse

The mouse is not working

- Check if the mouse cable is properly connected to the USB connector on your computer.
- Check if the mouse cable is damaged. If the mouse cable is damaged, the mouse will most likely need to be replaced.
- Restart your computer.
- Try a mouse that you know works in the same connector, to ensure that the USB connector is working.
- Reinstall the device driver.

Power

When you press the power button, the computer does not turn on

- If the AC adapter is connected to a surge protector or UPS, ensure that the surge protector or UPS is securely connected to an electrical outlet, is switched on and is working correctly.
- Check that the wall outlet is working properly by testing another device such as a radio or lamp that you know works. If the wall outlet is not working, contact an electrician or your power company for further assistance.
- Check that all devices on the computer are properly connected to your computer and that the AC adapter is properly connected to the surge protector or UPS.

If the problem persists, contact Alienware support (see “CONTACTING ALIENWARE” on page 73).

Printer

The printer does not turn on

- Check if the power cable is properly connected to a wall outlet.
- Check if the wall outlet is working properly by testing it with another device such as a radio or lamp that you know works. If the wall outlet is not working, contact an electrician or your power company for further assistance.

The printer does not print

- Check if the power cable is properly connected and the printer is properly connected to the computer. Ensure that the printer is turned on.
- Check if the printer cable is damaged. If the printer cable is damaged, a replacement may be required.
- Check if the printer is online. If the printer is offline, press the online/ offline button to switch it to online.
- If the printer is not the default printer, ensure that it is selected in the printer setup.
- Reinstall the printer driver.

Game Controllers

The computer does not recognize the game controller

- Check that the cable connecting the game controller to the computer is not damaged and that it is properly connected.
- Reinstall the device driver for the game controller.

Speakers

There is no sound from the speakers (external)

Ensure that subwoofer and the speakers are turned on:

See the documentation supplied with the speakers. If your speakers have volume controls, adjust the volume, bass, or treble to eliminate distortion.

Adjust the Windows volume control:

Click or double-click the speaker icon in the lower-right corner of your screen. Ensure that the volume is turned up and that the sound is not muted.

Disconnect headphones from the headphone connector:

Sound from the speakers is automatically disabled when headphones are connected to the headphone connector.

Test the electrical outlet:

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

Reinstall the audio driver

Run the PSA Diagnostics



NOTE: The volume control in some MP3 players overrides the Windows volume setting. If you have been listening to MP3 songs, ensure that you did not turn the player volume down or off.



CHAPTER 7: SYSTEM RECOVERY

Your computer ships with the following media:

- **Recovery CD or DVD** — Contains operating system installation media.
- **Support CD or DVD** — Contains drivers for your computer. You can also download the latest drivers and software for your computer from support.dell.com.
- Optional **AlienRespawn v2.0 disc** (if ordered) — Contains the AlienRespawn recovery image.



NOTE: Your computer ships with either AlienRespawn v2.0 or Dell DataSafe Local.

AlienRespawn v2.0

 **NOTE:** Back up all data before initiating a system recovery. Backup functionality is included in AlienRespawn™ v2.0, but as a precaution it is recommended to backup critical files onto an external media before initiating recovery.

AlienRespawn™ v2.0 is a recovery solution which is capable of resolving many software-related problems, including operating system configuration errors, driver installation errors, system file corruption, spyware/virus infection (when used in conjunction with antivirus software), and more.

Unlike other restoration methods, AlienRespawn v2.0 offers the ability to return your computer to its factory default settings without permanently losing your saved data.

If AlienRespawn v2.0 is unable to resolve your problem, contact Alienware Technical Support (see "CONTACTING ALIENWARE" on page 73).

Using AlienRespawn v2.0

1. Remove any CD/DVD media from your optical drive.
2. Turn on your computer (If the system is currently in Windows, restart).
3. When your computer boots, it will display a prompt on the screen for five seconds prior to loading Windows. While this prompt is on the screen, press <F10>.
4. Your computer will now boot into the AlienRespawn v2.0 environment. If this is the first time you have run AlienRespawn v2.0, you must accept the license agreement before proceeding.

Recovery Options

 **NOTE:** Back up all data before initiating a system recovery. Backup functionality is included in AlienRespawn v2.0, but as a precaution it is recommended to backup critical files onto an external media before initiating recovery.

AlienRespawn v2.0 offers three methods for system recovery. Each option offers a unique combination of restoration and data-backup features. The details of each method are described below.

Microsoft System Restore

This option provides access to Microsoft System Restore points stored on your computer without having to enter Windows itself. For more information on System Restore, see "Help and Support" within Windows.

This option is best for driver or operating system file corruption. It allows recovery through System Restore even if Windows cannot be accessed and resolves many operating system-related problems without altering user-created files.

System Restore points stored on your hard drive must be intact. If these files or the hard drive itself have been damaged, System Restore may not be accessible. Although System Restore will resolve many operating system problems, it is possible for significant problems, e.g. certain types of virus/spyware infections, to persist after recovery.

Advanced Recovery

This method will completely reformat your hard drive and return your computer to its original factory configuration resolving all software or configuration issues. This option is best for most software-related issues.

A backup of your entire current hard drive will be created in **C:\BACKUP**, from which data files may be copied to permanent locations. Once you have retrieved all desired files, this directory may be safely deleted.

In cases of virus or spyware infection, it is advisable to thoroughly scan and clean **C:\BACKUP** prior to copying files out of it; for this reason, it is recommended that you install and run your preferred third-party antivirus/antispyware utilities prior to retrieving your data.

If viruses or spyware were present prior to running AlienRespawn v2.0, there is a chance of re-infection from backup files if these are not successfully cleaned.

Factory System Recovery

This option is for last-resort system recovery.

This method will completely reformat your hard drive and return your computer to its configuration as shipped. This is a complete system recovery – the entire configuration is restored to its factory default state, resolving all software/configuration issues. Viruses or spyware will be eliminated. However, it is advised that you scan all external storage media to prevent re-infection.

No data backup will be performed. All saved data will be deleted.

Password Protection

Since AlienRespawn v2.0 has the ability to reformat your hard drive and can be accessed without entering Windows, the password-protection functionality has been included for your security.

This feature is disabled by default, but can be enabled through the Respawn Settings application, described below.



CAUTION: If you forget your password, you will not be able to access AlienRespawn v2.0, except by booting to the optional AlienRespawn v2.0 disc as described in “To Use the AlienRespawn v2.0 Disc” on page 64. Alienware Technical Support will not be able to recover your password. If you choose to enable password protection, you do so at your own risk.

To Enable or Change Password Settings

1. Click **Start**  → **All Programs** → **AlienRespawn v2.0**.
2. Click the icon labeled **Respawn Settings**.
3. The **Respawn Settings** application will launch.
 - If you are enabling password protection for the first time, enter the default password, “alienware” (case-sensitive), in the appropriate field, then click **Submit**.
 - If you have already defined a password, enter your current password in the appropriate field, then click **Submit**.
4. To change your password, enter the new password in both fields in the **Change Password** section, then click **Apply**.
5. To enable or disable password protection, select the check box labeled **Enable Respawn Password Protection**, then click **Apply**.
6. When password protection is enabled, you will be prompted to enter the password after pressing <F10> to run AlienRespawn v2.0 as described in “Using AlienRespawn™ v2.0” on page 62.

AlienRespawn v2.0 Disc

If you ordered the optional AlienRespawn v2.0 disc, you will receive it along with your computer. This disc will allow you to re-deploy AlienRespawn v2.0 to a new hard drive in the event of a hard drive failure.

To Use the AlienRespawn v2.0 Disc



NOTE: The Alienware recovery system is set up to boot from your CD-ROM drive. You can verify through the Boot Menu hotkey (see “Boot Menu” on page 38) that your computer is set to boot from the optical drive.

1. Insert the AlienRespawn v2.0 disc into your optical drive.
2. Turn on your computer (if the system is currently in Windows, restart).
3. Your computer will automatically boot into AlienRespawn v2.0 environment.
 - If no recovery partition is detected on your system, AlienRespawn v2.0 will proceed directly to the Complete Recovery option, restoring your system to its factory-shipped state.
 - If an existing AlienRespawn v2.0 recovery partition is detected, you will be prompted to choose to run the recovery process from either the hard drive or from the disc. Running from the hard drive is recommended; however, if this fails, running from the disc may resolve the problem. Whichever you choose, the recovery options will be the same as those described in this section.

Dell DataSafe Local Backup

Dell DataSafe Local Backup is a backup and recovery application that can restore your computer if you lose data due to a virus attack, accidentally delete critical files or folders, or if the hard drive crashes.

This application allows you to:

- Restore files and folders
- Restore your hard drive to the operating state it was in when you purchased your computer, without erasing the existing personal files and data

To schedule backups:

4. Double-click the Dell DataSafe Local Backup icon  on the taskbar.
5. Choose **Full System Backup** to create and schedule automatic backup of all the data in your computer.

To restore data:

1. Turn off your computer.
2. Disconnect all the devices connected to the computer (such as USB drive, printer, etc.) and remove any recently added internal hardware.



NOTE: Do not disconnect the monitor, keyboard, mouse, and the power cable.

3. Turn on your computer.
4. When the Alienware logo appears, press <F8> several times to access the **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.

5. Select **Repair Your Computer**.
6. Select **Dell Factory Image Recovery and DataSafe Options** and follow the instructions on the screen.



NOTE: The restoration process might take an hour or more depending on the size of the data to be restored.



NOTE: For more information on Dell DataSafe Local Backup, see knowledge base article 353560 on the Dell Support website at support.dell.com.



CHAPTER 8: BASIC SPECIFICATIONS

This chapter provides the basic specifications of your computer. For more detailed specifications, see the *Comprehensive Specifications* on the Dell Support website at support.dell.com/manuals.

Computer Model

Alienware M15x

Dimensions

Height 48.7 mm (1.92 inches) - Front and Back

Width 377.93 mm (14.88 inches)

Depth 308.51 mm (12.15 inches)

Weight with 6-cell battery (starting at) 4.08 kg (9.00 lb)

NOTE: The weight of your laptop will vary depending on the configuration ordered and the manufacturing variability.

Processor and System Chipset

Processor Intel® Core™ i7

System chipset Mobile Intel PM55

Memory

Connectors two internally-accessible DDR3 SODIMM sockets

Capacities 2 GB to 8 GB

Memory types 1067 MHz, 1333 MHz (dual channel configurations)

Memory

Memory configurations possible 2 GB, 3 GB, 4 GB, and 8 GB

Ports and Connectors

IEEE 1394 A one 4-pin serial connector

Network adapter one RJ45 connector 10/100/1000 Mbps

USB three 4-pin USB 2.0-compliant connectors, including one through eSATA/USB combo connector

eSATA one through eSATA/USB combo connector

VGA one 15-hole connector

DisplayPort one 20-pin connector

Audio one microphone connector, two stereo headphone/speaker connectors

ExpressCard one ExpressCard/54 connector

8-in-1 Media Card Reader one combo connector

AC Adapter

Type	150 W
Output current	7.7 A (continuous)
Rated output voltage	19.5 VDC

Communications

Network adapter	10/100/1000 Mbps Ethernet LAN on system board
Wireless	<ul style="list-style-type: none">• WLAN Mini-Card (Half Mini-Card slot)• WPAN, Bluetooth card (full card slot)

Discs/Cards Supported

Optical drive formats	SATA-compliant Blu-ray Disc, DVD-RW combo
Reader card types	<ul style="list-style-type: none">• Secure Digital (SD) memory card• Secure Digital High Capacity (SDHC) card• Secure Digital Input/Output (SDIO) card• Multi Media Card (MMC)• Memory Stick• Memory Stick PRO• xD-Picture Card (type - M and type - H)• Hi Density-SD (SDHD)

Discs/Cards Supported

Video cards	MXM 3.0 Type B compliant cards with individual power budget of 35W and 65W
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Display

Type (WLED)	<ul style="list-style-type: none">• 15.6 inch HD+ (1600 x 900)• 15.6 inch FHD (1920 x 1080)
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Keyboard (Backlit)

Layouts	U.S. and Canada; Europe; Japan
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Camera

Pixel	2.0 megapixel
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Battery

Type and dimensions

6-cell "smart" lithium ion (57 Whr)

Depth 53.8 mm (2.12 inches)

Height 21.3 mm (0.84 inches)

Width 213 mm (8.39 inches)

Weight 0.33 kg (0.72 lb)

9-cell "smart" lithium ion (86 Whr) (optional)

Depth 53.8 mm (2.12 inches)

Height 36.9 mm (1.45 inches)

Width 330 mm (12.99 inches)

Weight 0.5 kg (1.1 lb)

Voltage 12.6 VDC

Operating time Battery operating time varies depending on operating conditions and can be significantly reduced under certain power-intensive conditions.

Life span (approximate) 300 discharge/charge cycles

Battery

Temperature range

Operating 0° to 50°C (32° to 122°F)

Storage -20° to 60°C (-4° to 140°F)

Coin-cell battery CR-2032

APPENDIX A: GENERAL AND ELECTRICAL SAFETY PRECAUTIONS

Computer Setup

- Read all instructions marked on the product and in the documentation before operating your computer.
- Retain all safety and operating instructions.
- Never use this product near water or a heat source.
- Only set-up the computer on a stable work surface.
- Only operate the computer using the power source type indicated on the rating label.
- Never block or cover any openings or fans in the computer case. These are required for ventilation.
- Never insert objects of any kind into the ventilation openings.
- Ensure that your computer is properly grounded when in use.

Do not attempt to connect your computer into an outlet that is not properly grounded.

If an extension cord is used with your computer, ensure that the total ampere rating on the computer does not exceed the maximum rating on the extension cord.

Computer Use

- Route the power cable and all cables away from where people might walk or trip over them. Do not allow anything to rest on the power cable.
- Do not spill anything on or into your computer.
- To avoid electrical shock, always disconnect all power, modem and any other cables from the wall outlets before handling the computer.

Electrostatic Discharge (ESD) Warning

Electrostatic Discharge (ESD) can cause damage to internal system components if precautions are not taken. ESD is caused by static electricity and the damage caused is usually permanent.

Computer technicians wear a special wrist-strap that grounds them to the computer's case to prevent ESD damage. You can reduce the chances of ESD damage by doing the following:

- Turn off your computer's power and wait several minutes before starting to work.
- Ground yourself by touching the case of the computer.
- Touch only those items which must be replaced.
- Avoid walking around while replacing items inside the case, especially if you are on a carpet or during low temperature and low humidity.
- If you have to remove peripheral cards for any reason, place them on the portion of the computer's case that was removed. Do not touch the edge connectors at the bottom of the card that connect to the system board.

General Safety Precautions

- **Mechanical Shock:** Your computer should never be subjected to severe mechanical shocks. Careless handling of your computer may cause damage. Mechanical Shock is not covered by the warranty.
- **Electrical Shock:** If you do not open up your computer, there is nothing to worry about. Your computer protects itself against most irregularities in the power source.

When You Should Contact Alienware

- The battery, power cable or connector is damaged.
- Your computer has had liquid spilled into it.
- Your computer was dropped or the case was damaged.
- Normal operation of the computer does not occur when the operating instructions are followed.

Replacement Components or Accessories

It is only advised to use replacement parts or accessories recommended by Alienware.

APPENDIX B: CONTACTING ALIENWARE



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. Because availability varies by country and product, some services may not be available in your area.

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

1. Visit **www.dell.com/contactdell**.
2. Select your country or region.
3. Select the appropriate service or support link based on your need.
4. Choose the method of contacting Dell that is convenient for you.

Websites

You can learn about Alienware 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 Alienware Support through the following websites:

- **support.dell.com**
- **support.jp.dell.com** (Japan only)
- **support.euro.dell.com** (Europe only)
- **support.la.dell.com** (Argentina, Brazil, Chile, Mexico)

APPENDIX C: IMPORTANT INFORMATION

- BACKUP ANY DATA YOU HAVE BEFORE INITIATING A SYSTEM RECOVERY OR SENDING YOUR COMPUTER IN FOR REPAIR OR UPGRADES.
- RETAIN ALL BOXES THAT WERE ORIGINALLY SHIPPED TO YOU IN CASE YOU NEED TO RETURN ANY MERCHANDISE.

Printed in China.

Printed on recycled paper.



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