





Changing Booting Priority

The Boot menu in System Setup enables you to select the booting device and to set booting options.

Boot Device Priority field enables:

You to select the order in which the computer attempts to boot from different devices. The field has four (4) options: **CD-ROM Drive, Removable Devices, Hard Drive and Network Boot.**

To change the booting device priority, choose the device positions by completing the following:

1. At startup, press  to open **System Setup**.
2. Use  to select the **Advanced CMOS Setup** menu.
3. Highlight the 1st Boot Device option with  or  keys.
4. Press <**Shift+Plus**> keys until the option moves up in the list to the desired position **or** press <**Minus**> key until the option moves down in the list to the desired position.
5. Press <**Esc**> to return to the Exit menu.
6. Press <**Enter**> or <**F10**> to exit and save your changes.
7. Press <**Enter**> again to restart the computer.



If you want to start the system using a bootable CD, change the CD-ROM Drive to be the 1st Boot Device.

Using System Security

This section describes your computer security programs. The first is the standard BIOS security which is standard on almost all computers. The second is a advanced factory option *Biometric* security system that uses your fingerprint(s) to control access to your computer and individual files if necessary. You no longer have to worry about passwords being lost, stolen or forgotten.

BIOS Security

The BIOS security operations are explained below:

System Passwords

The computer provides (4) levels of password security: administrative-level (supervisor), user-level (user), HDD access and Password on Boot. These passwords prevent unauthorized access to the computer. The supervisor password enables full access to all System Setup fields. The user password enables full access to only the **Set User Password** and **Password on boot** security fields and read access to all other System Setup fields. The HDD Password controls access to the hard drive.

You may also enable the biometric security at boot.

The (3) security boot time options are:



The Biometric Security software **MUST** be installed prior to setting the security options to any of the fingerprint options.

- Disabled
- Text password
- Finger Print

If multiple users have access to the computer (such as in a network environment), a supervisor password can prevent unauthorized access to certain security options.


Choose the type of password security that is appropriate for your work.

If You Forget Your Password

It is very important that you do not forget your password. If you do, you cannot access your system. Write your password down and keep it in a safe place. If you do forget and cannot find the written note, please contact the Samsung Helpline. Please have your receipts available to verify the type and model of your computer. You may be charged for password removal.

Creating a Password


To create a password follow the instructions below:

1. At startup, press  to open **System Setup**.
2. Use  to select the **Security** menu.





Precautions for Password Entry:

You can enter letters or numbers, but you cannot use the function keys, such as the Shift key. Your computer does not distinguish between capitalized and lowercase letters in your password. As you type the password, the cursor moves but your password does not appear on the screen. Choose the type of password security that is appropriate for your work. If you want to set a user password, you must set a supervisor password first.

3. Use  to select **Set Supervisor Password** or **Set User Password**.
4. Press <Enter>. The **Set Password** dialog box appears.
5. Press <Enter> after you have typed your password. The computer prompts you to reenter your password for verification.
6. Type your password again and press <Enter>. A message appears telling you that the changes have been saved.



The “Password on boot” password **MUST** also be set in order for your machine to boot properly.

7. Use  to select **Password on boot**.
8. Press <Enter>. The **Set Password** dialog box appears.
9. Select the “Text Password” option.
10. Press <Enter> again to return to the **Security** menu.
11. Press  to go to the Exit menu.
12. Press <Enter> or <F10> to exit and save your changes.
13. Press <Enter> again to restart the computer.



If password use is not desired:

Follow the creating a password procedure above except leave the password field empty in step 5.

Biometric Security (Factory Option)

The factory optional fingerprint sensor provides unique security access to your computer. You will no longer have to worry about losing or forgetting your password. Since every person has a unique set of fingerprints, only a biometrically enrolled person may have access to your computer.



Advantages of Biometric Security are:

- Very high level of security
- No password to remember, lose or have stolen.
- Streamlined logon process.
- Single fingerprint will access many programs, eliminating passwords.

If you purchased the Biometric Security option, please refer to the manual provided for installation and use.

Using Power Management Options

Your computer includes **Power Management** options that can help the battery charge last longer and extend the life of the battery. Power-management options will slow down or shut off system components when the components are not being used.

Power management may slow down system performance. Your computer runs fastest with the power cord attached, when power management is disabled.

In the next sections, basic and advanced methods of power management will be discussed.

Basic Power Management Schemes

This section discusses the basic schemes of power management when the computer is operating on battery power or using AC power.



Standby vs. Hibernation


Standby unlike hibernation mode does not store unsaved information on your hard disk; it's stored only in the computer memory. If there is an interruption in power, the information is lost. So before putting your computer on standby, you should save your files.



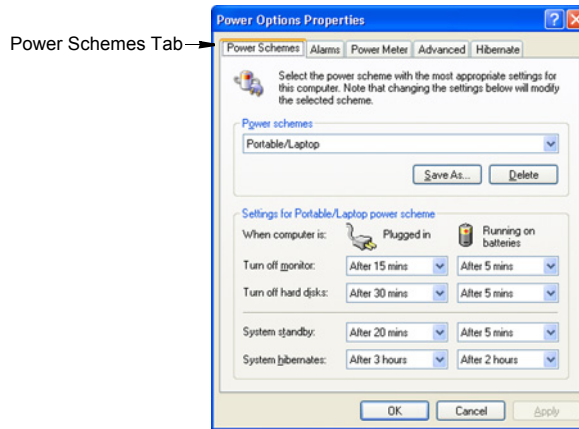
Changing Devices:

Do not change PC Cards while in standby or hibernate modes.

To enter the power management window complete the following:

1. Click **Start > Control Panel > Performance and Maintenance**.
2. Click  icon to display the **Power Options Properties** window.

3. Click the **Power Schemes** tab to display the basic power management options.



4. Select the time that you wish each of the following actions to occur in **Battery** and **AC power** mode.
- Turn off monitor:
 - Turn off hard disks:
 - System standby:
 - System hibernates:

Turning off the monitor and HDDs will save a substantial battery power, therefore when in battery only mode select the shortest time practical.

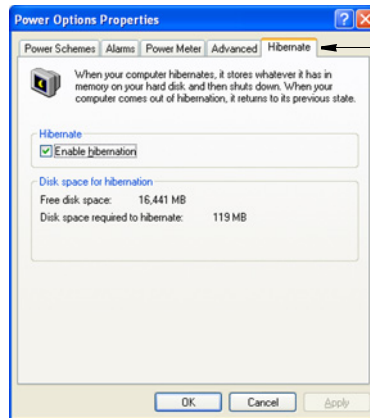
⚙ **Hibernate Mode** (*Power Management or Manual Method*)

When hibernation is used, your computer turns off and when you power up again, everything is restored exactly as you left it—including programs and documents you may not have saved or closed. Everything in memory gets saved to the HDD, and the monitor and hard disk get turned off.



If You Reinstall Windows:

You should re-establish hibernate in power options by opening **Power Options Properties** window and click on the **Hibernate** tab then click “Enable Hibernation”.



Hibernate Tab



Frequent Interruptions:

If you experience frequent interruptions, you might also consider putting your computer into automatic hibernation after a specified number of minutes using the power management options.



Standby Mode (*Power Management or Manual Method*)

Standby is used mainly for conserving battery power in your notebook computer. It also gives you the benefit of getting right back to your work without waiting for the computer to restart. Standby turns off your monitor and hard disks, placing your entire system in a low-power state. When you return to your computer, restores your desktop exactly as you left it. It is recommended that you do not enter standby mode with less than 20% battery power.

5. Click **OK** to set your power management options and close the window.




Rest Key:

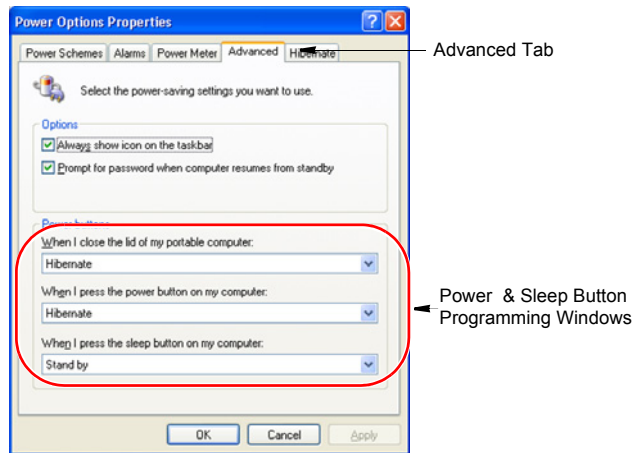
The manual  +  **<Fn+F5>** key combination will not activate Standby or Hibernate modes whilst you are playing a multimedia program or have an active USB device connected.


Advanced Power Management Schemes

This section discusses the advanced power management schemes. There are two buttons that you can use to manually conserve power.



To enter the power management window complete the following:

1. Click **Start > Control Panel > Performance and Maintenance**.
2. Click  icon to display the **Power Options Properties** window.
3. Click the **Advanced** tab to display the advanced power management options.



4. Select the mode (**Do nothing/Ask me what to do/Standby/Hibernate/Shut down**) assigned to the Power button and/or Rest  <F5> key. Also select the action (**Do nothing/Standby/Hibernate**) associated with closing the computer lid.



The “Rest” key is assigned to the  +  <Fn+F5> key combination. See “Basic Power Management Schemes” on page 52 for a better understanding of Standby and Hibernate modes.

5. Click **OK** to set your power management options and close the window.
- You can return to normal operation after you have used one of the “Power Management” buttons by quickly pushing and releasing the **Power** button.

Using the Hard Drive

Your computer includes a removable IDE (integrated drive electronics) hard drive. The IDE hard drive can store the data and programs your computer uses. The drive plugs into a connector on the system board.



The hard drive that comes with your computer has already been formatted. Do not format the hard drive. Doing so destroys all data contained on the drive. If you need to format a new drive, or want to erase all data on your existing hard drive, refer to the manual for your operating system.

Installing/Reinstalling a HDD

To install a new HDD you must contact your local service representative. He will do the physical change of the drive. You should complete the instructions below before you go to the service center.

See the information below before you install your HDD:

- Back up data files of your old hard drive.
- For system boot with CD-ROM, under the Boot menu in System setup, set Bootable CD Check to Enabled and set Boot Device Priority is ordered starting from the [DVD/CD-ROM].

When you are ready to install the new HDD use the Recovery CD-ROM to install the device driver.

(Re)Installing Windows and Device Drivers

Use System Recovery CD to (re)install OS and System Software CD to (re)install device' drivers.



The System Recovery CD is used to (re)install the OS and System Software to a new HDD or recover from a system crash.

Notebook computers that ship from the factory include System Recover CD-ROM and System Software CD-ROM, which contains a copy of the applications and drivers needed for computer's operating system.

In the unlikely event that programs on the computer hard drive become corrupted or are erased, you can use the System Recovery CD-ROM to reinstall your operating system and then System Software CD-ROM to reinstall your original applications and drivers.

Video Features and Configuration

All these video modes can be displayed on an external monitor. However, if you disconnect an external monitor that was attached to your computer and then start the computer, the LCD may revert to a different resolution than the one you chose for the external monitor.

Resolution and Colour Depth

The resolution of the LCD is the sharpness of the image it can display. Resolution is measured by the number of pixels (individual dots) displayed on the entire screen. In general, the more pixels the LCD can display, the better the image.

The number of colours the LCD can display is measured by how many bits the LCD uses to represent each pixel:





- 16-bit colour can support 64 K (65,536) colours.
- 32-bit colour can support 16 M (16.8 million) colours.

All these video modes can be displayed on an external monitor. However, if you disconnect an external monitor that was attached to your computer and then start the computer, the LCD may revert to a different resolution than the one you chose for the external monitor.

Adjusting the LCD Display

You may wish to adjust the LCD (Liquid-Crystal Display) when you begin using your computer. A TFT (Thin-Film Transistor) LCD does not require adjustment for contrast because the contrast is set to remain at maximum.

To adjust the LCD:

- Press  +  <Fn+Up Arrow> to increase the display brightness.
- Press  +  <Fn+Down Arrow> to decrease the display brightness.

Configuring Display Features

The following sections describe how to configure the display settings on your computer.




Display Resolution Notes:

When Windows XP is initially installed it will automatically adjust the resolution to maximum available.

Changing Colour Depth and Resolution

To change the colour depth and resolution of your LCD:

1. Click **Start > Control Panel > Appearance and Themes**.
2. Click  icon. The Display Properties window appears.
3. Click the **Settings** tab. The Settings screen appears.
4. To change the colour depth, click the arrow next to the **Colour quality** palette and select the available colour depth you want.
5. To change the resolution, click and drag the slider under the **Screen resolution** until you select the available resolution you want.
6. Click **OK**.
7. Follow the prompts that appear on the screen.



Using Dual View Mode

Single View mode is the basic display mode which displays same view on all the display devices connected to a system.

Dual View mode is the “Extended screen mode” supported in Windows, which displays separate views on each display devices connected to a system.



<Fn+F4 LCD/CRT> Key Combination

The  +  Key Combination will not operate while you are playing a MPEG file or a Video CD.




Occasionally the video output in dual view mode becomes erratic.



The default setting on your system is Single View mode.

Setting Dual View Mode

To set Dual View mode on your system:

1. Connect peripheral display device such as monitor, television or digital flat panel (DFP) to your system and start the system.
2. Select **Start > Control Panel > Appearance and Themes**.
3. Click  icon. The Display Properties window appears.
4. Click the **Settings** tab. The Settings window appears.
5. Check **Extend my Windows desktop onto this monitor**.
6. You can drag the second monitor image to position where you want your extended screen space with respect to the primary monitor (usually the LCD).

To confirm whether the system is set properly with Dual View mode:

1. Open **Display properties** and click **Settings** tab.
2. Place the cursor on the first monitor picture and click and hold over a second, a number **1** will be shown on the first actual monitor screen. And place the cursor on the second monitor picture and click and hold over a second, then digit number **2** will be shown on the second actual monitor screen.

3. The monitor displays digit number 1 is the primary monitor and number 2 is the secondary monitor.


In **Windows explorer**, the program is displayed on the primary monitor, if you can drag it to the secondary monitor, then Duo View mode is now working properly.



The secondary monitor has a display of 256 colours (colour depth) and 640x480 pixels (resolution) at first. The colour depth and resolution of primary/secondary monitors are separately changeable.

Changing Colour Depth and Resolution of 2nd Monitor

To change the colour depth and resolution of 2nd Monitor, TV or DFP):

1. Click **Start > Control Panel > Appearance and Themes**.
2. Click  icon. The Display Properties window appears.
3. Click the **Settings** tab. The Settings screen appears.
4. Click on the display number of the monitor you wish to change.



TV/DFP Display Resolution Limitations

You can change the Colour Depth and Resolution within the limitations of the TV/DFP. Adjust as necessary to get a good display.

5. To change the colour depth, click the arrow next to the **Colour quality** palette and select the available colour depth you want.
6. To change the resolution, click and drag the slider under the **Screen resolution** until you select the available resolution you want.
7. Click **OK**.
8. Follow the prompts that appear on the screen.

To reset the system to Single View mode:

1. Start **Display properties**.
2. Click **Settings** tab.
3. Click the second monitor among two monitor pictures.
4. Uncheck **Extend my Windows desktop onto this monitor**.
5. Click **OK**.

Using Multimonitor Mode

You may duplicate your LCD screen on an external monitor, television or digital flat panel.



TV Connection Restrictions:

You should only connect/disconnect cables and wires to your computer and TV when the power is off.



TV/DFP Support Limitations:

The computer will only support televisions with S-VHS input capability. The standard composite video in port is not supported.

You can not use TV-out port to connect to your television or digital flat panel in DOS mode.

When TV-Out is activated, your computer screen will not be active.

To start using multimonitor mode proceed as follows:

1. Connect the external monitor to the connection on the back of your computer.
2. Press the **<Fn + F4>** key combination, the LCD will be duplicated on the monitor, television or digital flat panel.



<Fn + F4> key combinations

Each time you use the  +  key combination the LCD/Monitor combination changes as follows:

- Both displays are displaying the computer output (LCD & Monitor).
- Monitor, television or digital flat panel only is displayed the computer output.
- LCD only is displaying the computer output.

To stop using multimonitor mode proceed as follows:

1. Press the <Fn + F4> key combination until only the LCD is displaying the computer output.
2. Disconnect the external monitor or television from the connection on the back of your computer.

Using Powerplay




The Powerplay technology supplied with your graphics adapter to extend battery life.



POWERPLAY Use Limitations

Activating POWERPLAY will reduce your graphic card performance.

To activate POWERPLAY proceed as follows:

1. Click **Start > Control Panel > Appearance and Themes**.
2. Click  icon. The Display Properties window appears.
3. Click the **Settings** tab. The Settings screen appears.
4. Click the **Advanced** button. The **(Multiple Monitors) and M7 Properties** window appears.
5. Click the **POWERPLAY** tab
6. Click the  **POWERPLAY** button in the *POWERPLAY Settings* section. The button will change to a  button and activate the other options available.

Using Options

You can order the following options for your Notebook computer from your authorised reseller:

- An extra AC adapter.
- An auto adapter that enables you to charge the computer's battery and operate the computer while in an automobile.
- An extra battery pack.
- 128, 256 and 512 MB DDR SDRAM memory modules that enable you to upgrade your computer's memory to a maximum of 1 GB.
- A CD-ROM drive module (CD Only or CD R/W).
- DVD/CD-RW Combo drive:
- A DVD-ROM drive module.
- Bluetooth/Wireless
- FIR (Fast Infrared) Connection
- 2nd HDD
- Port Replicator
- Biometric Security
- Memory Stick

The options that are available may change periodically. Contact your reseller for updated information on current and new options.

Memory Modules

You can increase system memory by installing optional memory modules. You can install a 128 256 or 512 MB modules.



To avoid possible system problems, use only approved memory modules in your computer.

Before You Install Memory



To prevent personal injury and damage to the equipment, follow the precautions listed here before installing a memory module.

Take the following precautions when installing a memory module:

- Before you remove the memory module compartment door, turn off the computer, unplug the power cord, and remove the battery. Also, disconnect any peripheral devices.
- Before handling a memory module, discharge any static electricity by touching a grounded surface or using a grounding wrist strap.
- Do not insert objects with conductive material, such as metal screwdrivers or graphite pencils, into the memory-module compartment.
- Be careful in handling the metal plate of the memory door.

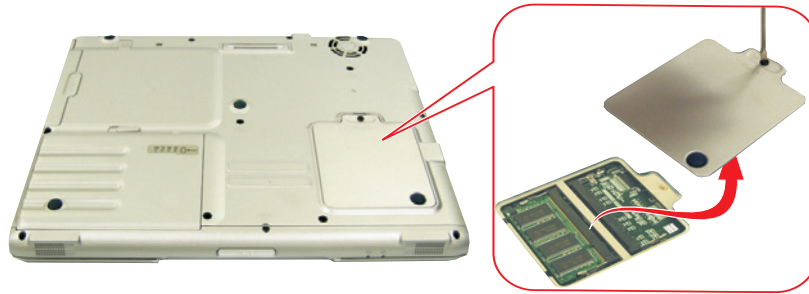
Installing a Memory Module



Handle a memory module carefully. Hold them only by the edges.

To install a memory module:

1. Turn the computer over so that the bottom faces up.
2. Using a screwdriver, remove the screw that holds the memory-module compartment door in place.



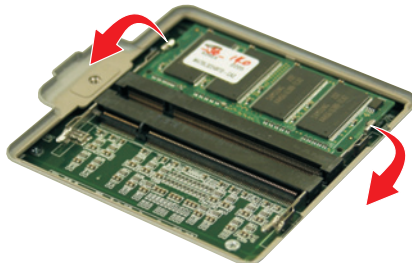
3. Grasp the edge of the door and pull the door off the chassis.



Memory Module Precautions:

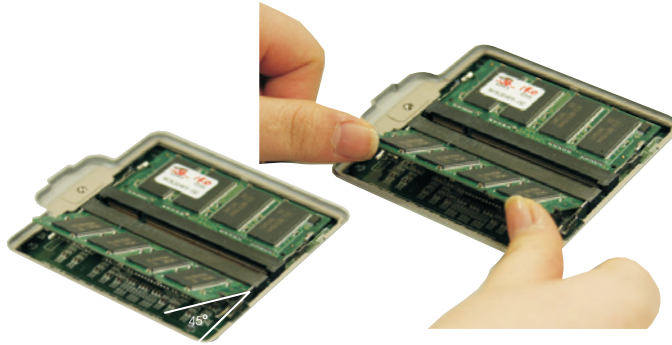
When removing the module, pull on the plastic portion of the connector slots tabs only. Do not pull on the metal part of the tabs, this may damage the tabs.

4. Remove the installed module if necessary.
 - a. Pull the tabs on the connector slot outward slightly, until the edge of the memory module pops up.



- b. Hold the memory module by the edges and pull it forward out of the compartment.

5. Align the connector on the memory module with the connector of the slot.
6. Push the memory module into the slot at a slight angle (~45°) until the connectors are fully engaged.



7. Push down on the edge of the memory module until the module snaps into place.
8. Align the memory module compartment door with the compartment and push the door down until it snaps into place.
9. Reinstall the screw you removed in step 2.
10. Turn on the computer and perform a complete POST to check the memory integrity.

Bluetooth/Wireless

Bluetooth/Wireless technology allows wireless communication between bluetooth communication devices, such as cellular phones, desktop and other notebook computers.

To setup and use the Wireless LAN, Please refer to the user manual provided with the option at the time of purchase.

Wireless LAN

The wireless LAN option allows easy connection to large or small office networks while also providing freedom from the constraints of cables and sockets.

To setup and use the Wireless LAN, Please refer to the user manual provided with the option at the time of purchase.

Port Replicator

Contact your reseller for a list of port replicator options available for your Notebook computer. User's manuals are included with the port replicator options.

FIR (Fast Infrared) Connection









FIR Technology Limitation

The transmitter and the receiver should be no more than 50cm apart.

BIOS Setup



The BIOS setup must be completed first in order for the option to operate properly.

1. At startup, press  to open **System Setup**.
2. Use  to select the **Advanced CMOS Setup** menu.
3. Highlight the I/O Device Configuration option with  or  keys and press **<Enter>**.
4. Highlight the FIR port with  or .
5. Press **<Shift+Plus>** keys until the option changes to **Enabled**.
6. Press **<Esc>** to return to the Exit menu.
7. Press **<Enter>** or **<F10>** to exit and save your changes.

Windows Setup

1. Right-click **My Computer**.
2. Click **Properties**, the System properties window pops up.
3. Click the hardware tab then click the device manager button in the device manager section.
4. Double-click the Infrared devices
5. Double-click the IrDA Fast Infrared Port, the IrDA Fast Infrared Port properties window pops up.
6. Click on the Advanced tab and set the device as follows.
 - Select the “Infrared Transceiver A” in the *properties* section.
 - Select the “Vishay TFDS-6500” in the *value* section.
7. Click **OK**