

Adjusting the Volume

- **Music** : Select to listen to music.
WOW HD technology has been used.
- **Movie** : Select to watch a movie.
TruSurround XT technology has been used.
- **When using a Headphone plugged in the Headphone jack** : Some of the setting details under each menu will change.
CS Headphone technology has been used.

► For Windows XP

1 Click **Control Panel > Sound, Voice and Audio Device > Sound and Audio Devices**.

2 Click the audio tab, select **SRS Premium Sound in Play > Default Device (D)**:, and then click the **OK** button at the bottom.

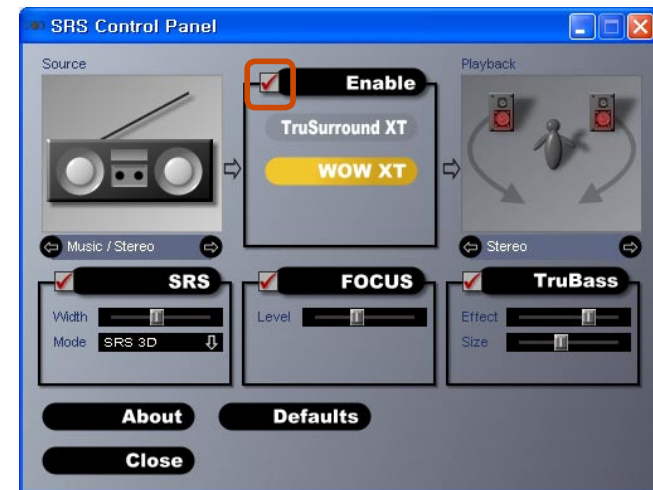
In this case, although you can change the volume in the SRS Mixer, you can also change the volume in the Master Volume of the **Realtek HD Audio Output** Mixer.

Therefore, when SRS is selected, you can set the Master Volume of the **Realtek HD Audio Output** Mixer to the maximum value and then set the actual volume using the SRS Mixer.

This operation may not be required depending on the type of SRS driver.

3 Click on **Control Panel > Sound, Voice and Audio Device > SRS Control Panel**.

Select the **Enable** checkbox and select a mode.



- **WOW XT (Music)** : Select to listen to music.
- **TruSurround XT (Movie/Video)** : Select to watch a movie.



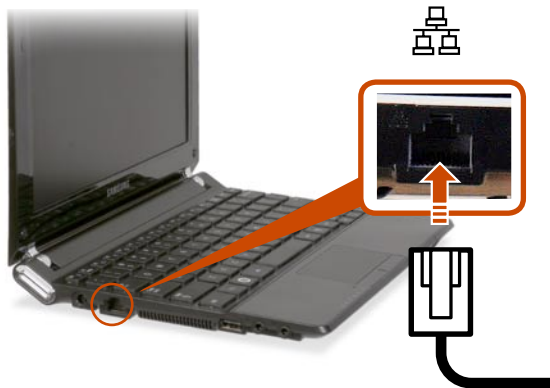
- The SRS function is only supported for a computer's built-in speakers or headphones.
- It is recommended unchecking the SRS option before recording, and checking it before playing sound. This is to prevent sound distortion due to the double application of the SRS effect when a user plays the recorded file by using stereo mix.

A wired network is a network environment used for a company network or broadband internet connection at home.



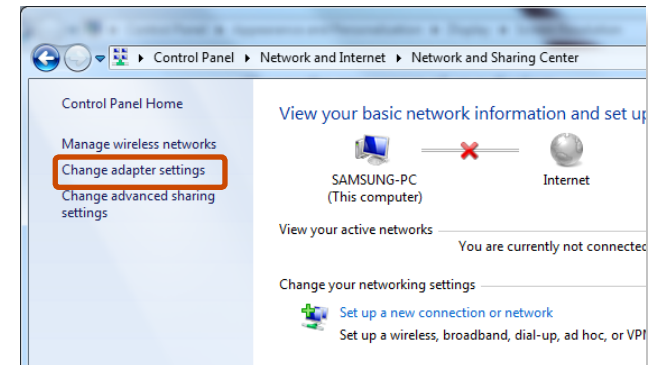
- Since these descriptions are written on the basis of the latest operating system, Windows 7, some of the content and the figures of the descriptions may differ depending on the operating system. Since the procedures for other Windows operating systems are similar, use the computer referring to these descriptions.
- The figures used for the description are of a representative model. Therefore the figures may differ from the real ones.

1 Connect a LAN cable to the computer's LAN port.



2 ► **For Windows 7**

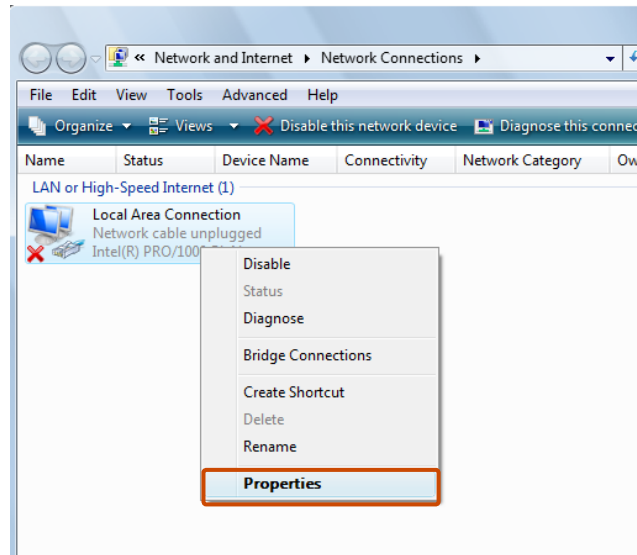
Click **Start > Control Panel > Network and Internet > Network and Sharing Center** and click on **Change adapter settings** in the left menu pane.




► **For Windows XP**

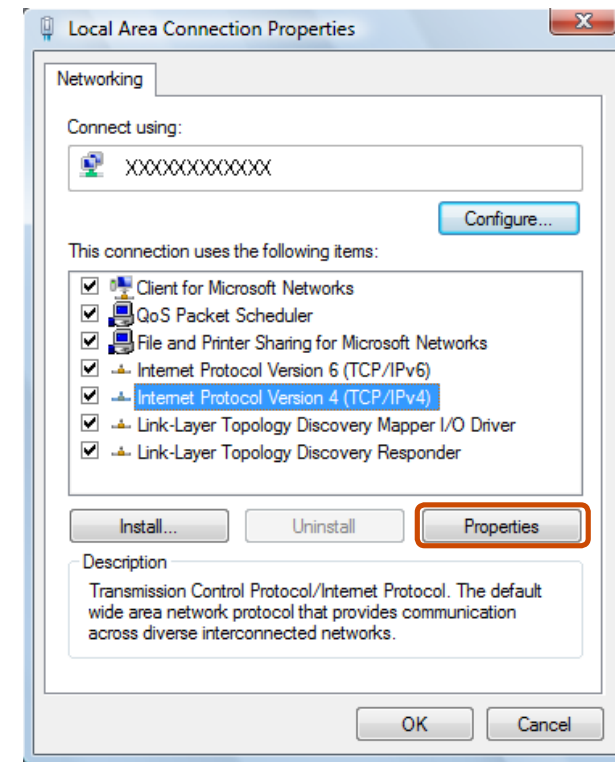
Click **Start > Control Panel > Network and Internet Connections > Network Connection**.

- 3 Select **Local Area Connection** and click the right button of the touch pad and select **Properties**.




 The LAN Device name may differ depending on your computer's Network Device.

- 4 ► **For Windows 7**
Select **Internet Protocol Version 4(TCP/IPv4)** from the list of Network Components and click **Properties**.



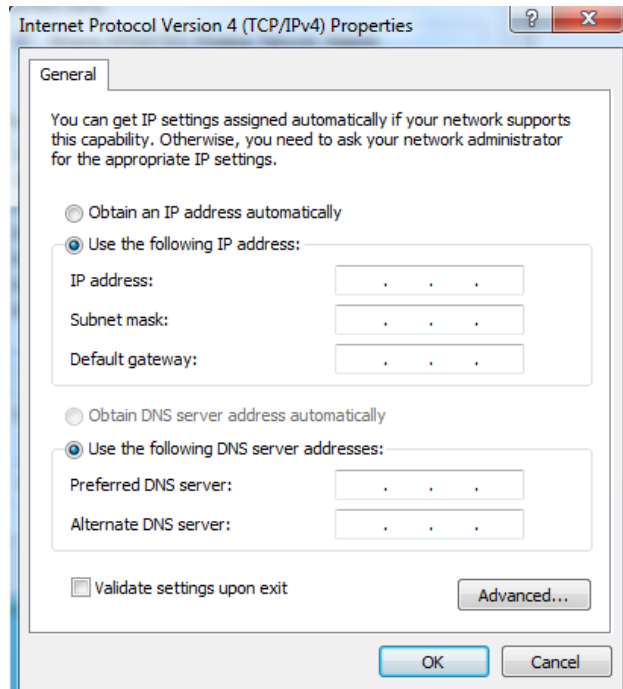
► **For Windows XP**

Click **General** tab and select a LAN driver from **Connect using:**. Select **Internet Protocol(TCP/IP)** and click **Properties**.

-  • The Network Component name may differ depending on the Operating System Installed.
- To add a network component, click **Install** in the screen shown in the figure above. You can add clients, services, and protocols.

5 Configure the IP settings.

When using DHCP, select **Obtain an IP address automatically**. To use a static IP address, select **Use the following IP address**, and set the IP address manually.



When not using DHCP, ask your network administrator for the IP address.

6 When you have completed the settings, click the **OK** button. The network settings have been completed.

Using the <Wake On LAN> Function

<Wake On LAN> is a function that activates the system from Sleep mode when a signal (such as a ping or magic packet command) arrives over the network (wired LAN).

1 ► For Windows 7

Click **Start > Control Panel > Network and Internet > Network and Sharing Center** and click on **Change adapter settings** in the left menu pane.

► For Windows XP

Click **Start > Control Panel > Network and Internet Connections > Network Connections**.

2 Right-click on the Local Area Connection and select **Properties**.

3 Click **Configure > Power Management** tab. Select **Allow this device to bring the computer out of standby**, then click **OK**. Restart the system.

- If the system wake up from Sleep mode even though there is no received signal, use the system after disabling the <Wake On LAN> function.
- The LAN LED may not be turned off if System is shutdown without disabling the WOL <Wake on LAN> option.
- Connecting a wired LAN while using a wireless LAN may not activate the <Wake On LAN> function. Set the Wireless LAN to **Disable** to use the <Wake On LAN> function.
- <Wake On LAN> feature may not work while using Hybrid power saving feature.



For **Windows 7**, **Wake On LAN** is not supported **Ping**.

Other features for reference



When connected to a 100Mbps/1Gbps wired LAN and the computer exits Sleep/hibernation mode, a message appears informing you of a connection to a 10Mbps/100Mbps wired LAN. This happens because when the computer exits standby/hibernate mode, restoring the network takes about 3 seconds. When the network is restored, it operates at 100Mbps/1Gbps.

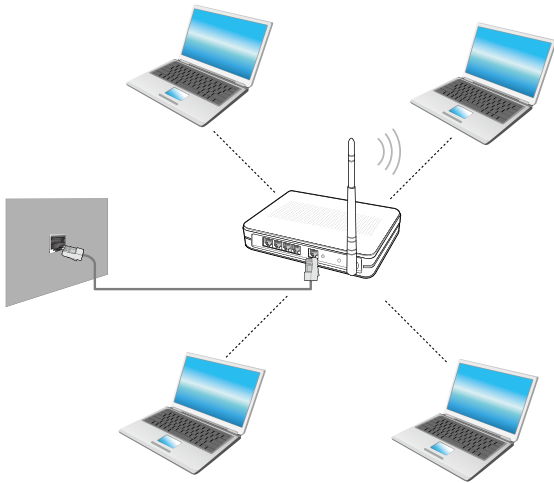



When system is running on battery, some time it takes about 20sec after inserting LAN cable to be able to connect to internet. This symptom happen as a result of power saving feature to reduce battery consumption.



When system is running on battery, the Wired LAN speed is decreased automatically to reduce battery consumption. In such case, a 1Gbps /100Mbps LAN would function at 100Mbps/10Mbps speed.

A wireless network (Wireless LAN) environment is a network environment that enables communicating between multiple computers at home or a small-size office through wireless LAN devices.



- The descriptions below are for computer models with a Wireless LAN card or device. A Wireless LAN device is optional. The pictures in this manual may differ from the actual product depending on your wireless LAN device model.
- To use the wireless LAN, you have to turn the wireless LAN on first by pressing the **Fn** + **F9** keys. If the wireless LAN is turned on, the Wireless LAN LED  is lit.



What is an Access Point (AP)?

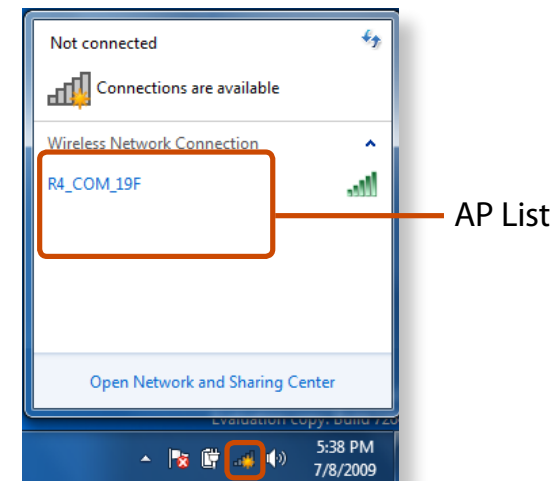
An AP is a network device that bridges wired and wireless LANs, and corresponds to a wireless hub in a wired network. You can connect multiple wireless LAN installed computers to an AP.

Connecting to a Wireless LAN

If there is an AP, you can connect to the Internet via the AP using the Wireless LAN connection method provided by Windows.

► For Windows 7

- 1 If you click the **Network Connections**  icon in the system tray, a list of available APs appears. If you select an AP to connect to, the **Connect** button appears.

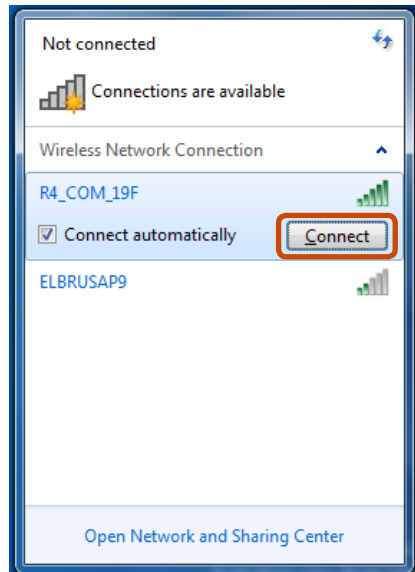


2 Click **Connect**.

If a network key is set for the AP, enter the network key and then click **Connect**.



For the network key, please ask your network administrator.

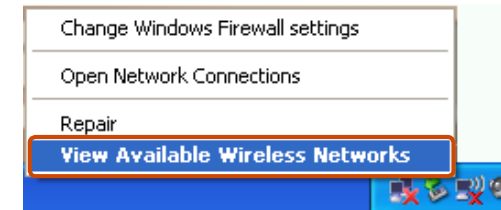


3 When **Connected** to the AP is displayed, click the **Close** button.

You can access the network.

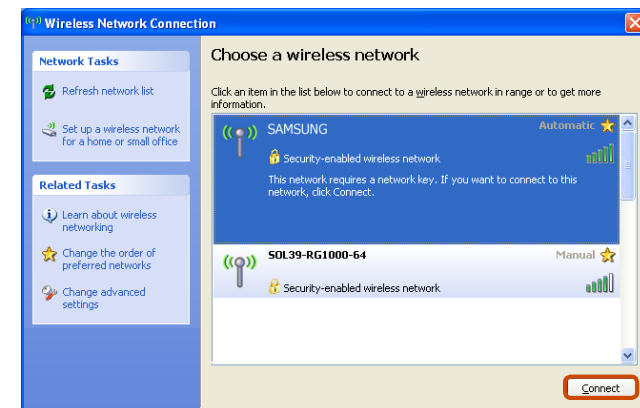
► For Windows XP

1 Click the **Wireless Network Connection** icon from the Taskbar using the right button of the touch pad. Then, click **View Available Wireless Networks**.



2 Select an AP to be connected and click **Connect**.

If a network key is set in the AP, the network key input window will appear. Enter the network key in the input window and click **OK**.

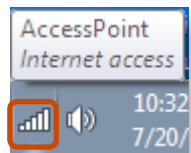


For a network key, contact the network administrator.

- 3 Once **Connected to AP** is displayed, you can use a wireless network.

Checking the network connection status

Move the mouse pointer over the **Wireless Network Connection** icon on the taskbar, and the connection status is displayed.



Windows 7



Windows XP

Easy Content Share is a DLNA application that allows you to play photos, videos and music files on your TV.



- These descriptions are for Windows 7 and for supported models only.
- The Digital Living Network Alliance (DLNA) aligns industry leaders in the CE, mobile, and PC industries through digital interoperability, and DLNA-certified devices allow users to play videos, photos and music files stored on a computer on a TV.
- To play content using DLNA technology, both your computer and TV must be DLNA certified. For information on whether a product supports DLNA, refer to the respective user manuals.

To play videos, photos and music files stored on a computer, configure the settings in the order as shown below.

- 1. Configuring the network settings for your computer and TV**
- 2. Adding shared content on your computer**
- 3. Playing content on your TV using your computer**

Configuring the network settings for your computer and TV

To share content, all shared devices must be connected to the same access point.

Configure the network settings by following the steps below.

- 1** Connect your computer and TV to an access point through a wired or wireless LAN connection, as shown in the figure below.

[Network connection diagram]



- 2** Configure the IP address settings for your computer and TV. You must check the **Obtain an IP address automatically** (DHCP) checkbox.

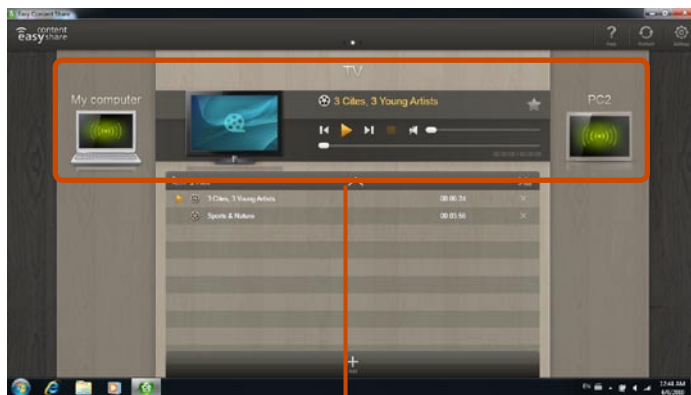


- For more information on how to configure the IP address for your computer, refer to **Chapter 2. Using the Computer > Network.**
- For more information on how to configure the IP address for your TV, refer to the user manual of your TV.

3 To check whether the network settings have been configured correctly, double-click the **Easy Content Share** icon on the your computer's Desktop to run the program.

(If the program icon does exist on the Windows Desktop, select the corresponding program from **Start > All Programs > Samsung.**)

If the connected computer and TV are shown in the program window, the network settings have been configured successfully.



Devices that can share content





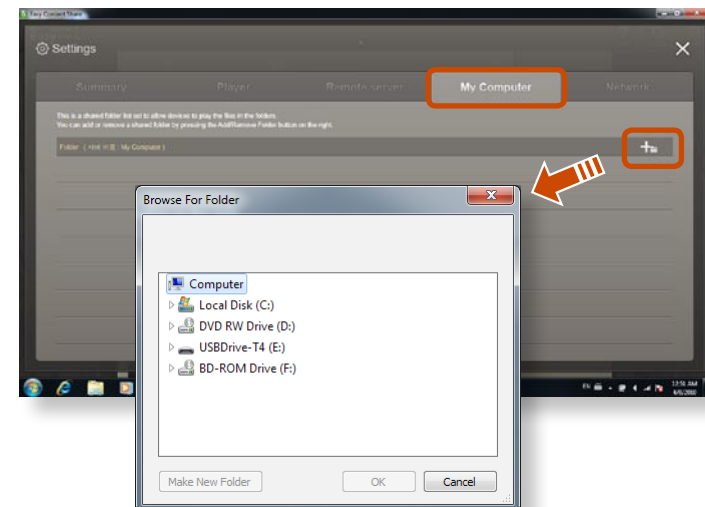
- If a connected device is not displayed, refer to **Chapter 4. Troubleshooting > Q&A > Easy Content Share Related.**

Adding shared content on your computer

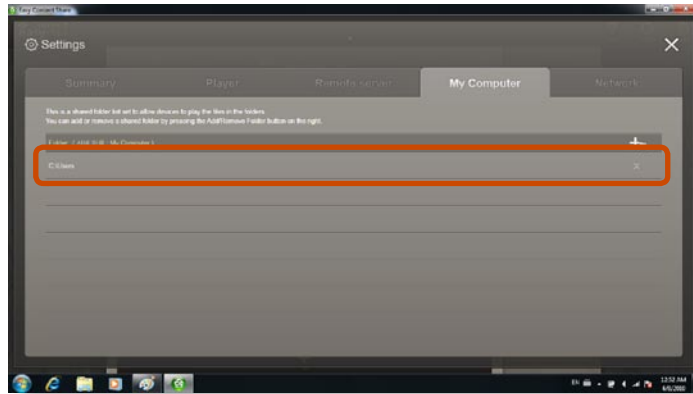
Add the videos, photos and music files that you want to play on your TV as shared items.

You can only play shared items on your TV.

- 1** Click **Settings**  at the top right of **Easy Content Share**.
- 2** Click **My computer > Add Folder** . The **Browse For Folder** window appears. Select a folder to share and click **OK**.



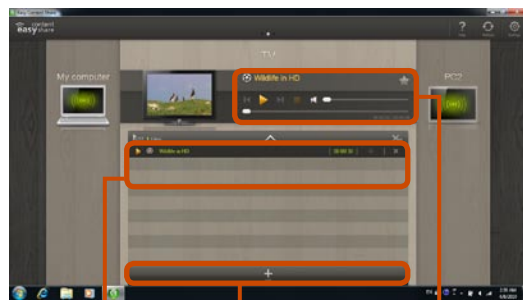
- 3 The selected folder is added to the shared list.



Playing content on your TV using your computer

After you have set photos, videos and music files as shared items, you can play them on your TV using your computer.

- 1 In **Easy Content Share**, select the TV you want to use to play content.



Playlist

Play control panel

Add content to play

- 2 Select the item you want to play in the playlist, and then click **Play** ▶.

- 3 The selected file is played on the TV. Using the Play Control panel, you can control the item being played on the TV.



- 4 To stop playing, click **Stop** ■.

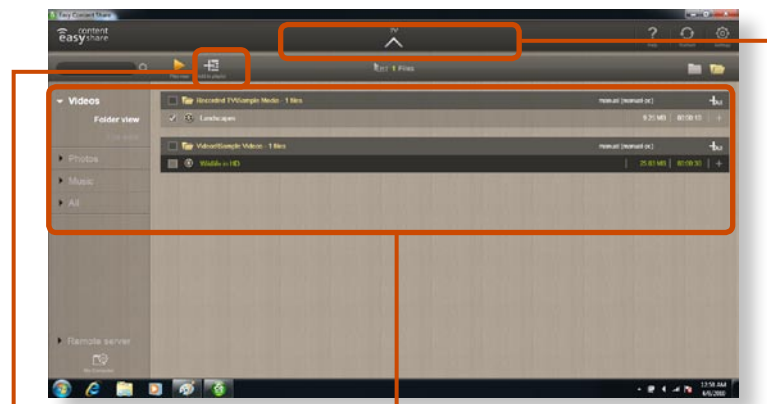


Easy Content Share does not support subtitles due to DLNA constraints.

To use subtitles, refer to **Chapter 4. Troubleshooting > Q&A > Easy Content Share Related**.

Adding a video, photo or music file to the playlist

- 1 Click **Add Content**  in the Playlist screen. The shared content list is displayed.
- 2 In the shared content list, check the checkbox in front of the item you want to add to the playlist, and then click **Add to playlist** .



Add the selected item to the playlist

Return to the playlist screen

Shared content list

- 3 Click **Return to playlist screen** .

In the playlist screen, you can find that the selected item has been added to the playlist.

Playing the content stored on a computer when Easy Content Share is not installed

You can also play the videos, photos and music files stored on a computer when **Easy Content Share** is not installed on your TV by using **Windows Media Player**.

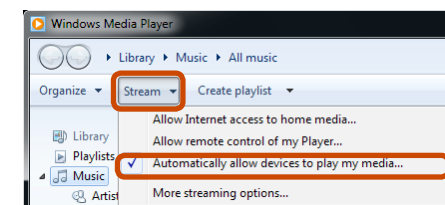
As described in the steps below, configure the content sharing settings to play content on your TV.



The computer containing the shared content (when Easy Content Share is not installed) must be connected to the same access point to which the computer where **Easy Content Share** is installed and the TV is connected to.

► For Windows Media Player 12

- 1 Click **Start > All Programs > Windows Media Player**.
- 2 Click **Stream** and check the **Automatically allow devices to play my media...** menu item.

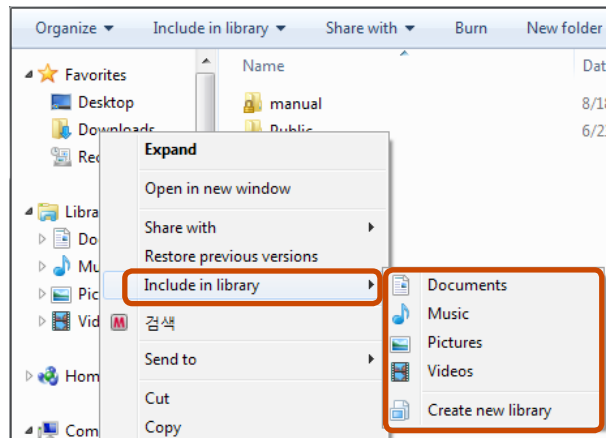


3 Click **Start > All Programs > Accessories > Windows Explorer**.

4 Right-click the folder to share. From the menu displayed, point to **Include in library**.

Click **Videos, Photos** or **Music** in the displayed sub menu, according to the type of content contained in the selected folder.

If the selected folder contains two or more types of content, you must click each corresponding menu item (**Videos, Photos** or **Music**) to register each type of content.

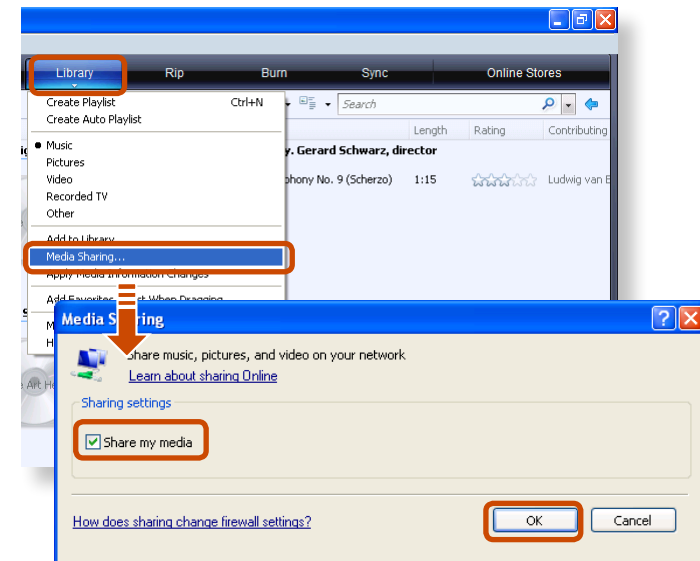


► For Windows Media Player 11

1 Click **Start > All Programs > Windows Media Player**.

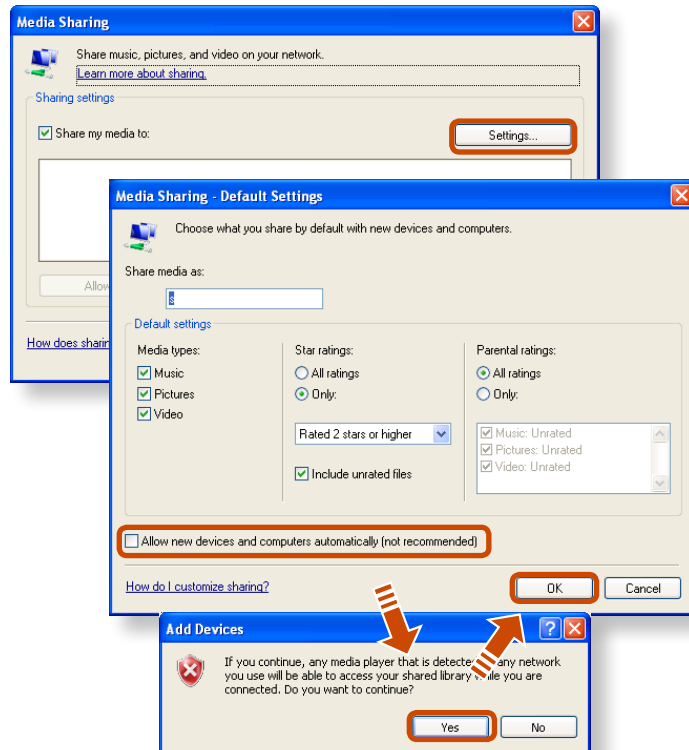
2 Click **Library > Media Sharing**.

The **Media Sharing** window is displayed. Check the **Share my media** checkbox and then click **OK**.



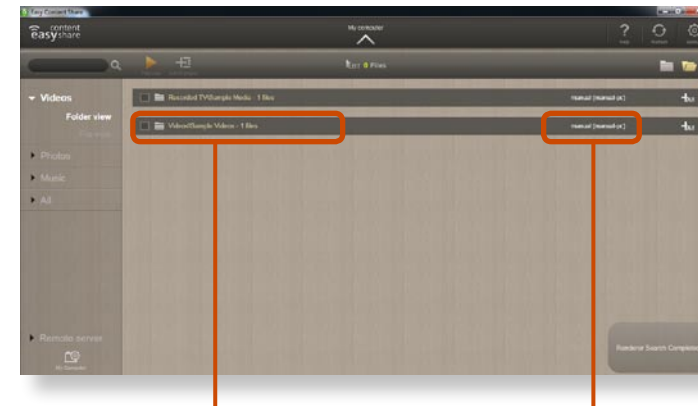
3 In the **Media Sharing** window, click **Settings...** The **Media Sharing - Default Settings** window is displayed. Check the **Allow new devices and computers automatically (not recommended)** checkbox.

A popup window is displayed. Click **Yes**. Then click **OK** in the **Media Sharing- Default Settings** window and in the **Media Sharing** window.



After the registration has been finished, you can find the added folder is listed in the shared content list of **Easy Content Share**.

For a shared content item, the name of the computer where the item is stored is displayed next to it, allowing you to identify the computer. This is useful when multiple computers are providing content.



A folder added as a shared item

The name of the PC where the content is stored



Content sharing is only available with **Windows Media Player 11** or later.

If your **Windows Media Player** is earlier than **Windows Media Player 11**, download and install **Windows Media Player 11** or later from the Microsoft website.



Chapter 3. Settings and Upgrade





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You can adjust the LCD brightness in 8 levels.



The screen brightness is automatically set to the brightest level (brightness level 8) when AC power is connected and the brightness is automatically set dimmer when the computer runs on battery power to extend the battery use time.

Controlling the Brightness Using the Keyboard

Adjust the LCD brightness by pressing the  +  key or the  +  key.

The LCD brightness can change up to 8 levels and the brightness increases by 1 level when pressing the  +  key once.



• **Maintaining the changed LCD brightness even after turning the computer on again**

To maintain the LCD brightness set by using the brightness control keys or through the Power Options, follow the procedures below.

► **For Windows 7**

1. Click **Control Panel > Hardware and Sound > Power Options**.
2. Click **Change the settings** of the currently configured mode.
3. Adjust the display brightness adjustment menu bar and click the **Save the changes** button.

► **For Windows XP**

1. Turn the computer on and press the **F2** key when the SAMSUNG logo appears on the screen to enter the BIOS Setup.
2. Select the Boot menu and set the **Brightness Mode Control** item to **User Control**.
3. Press the **F10** key to save the settings and exit Setup.

• **Saving battery power consumption**

Decreases the LCD brightness when the computer is running on battery power to save battery power consumption.



• LCD bad pixels principle of laptop computer

Samsung observes the specifications regarding strict quality and reliability of LCD. But in spite of that, it is inevitable that there might be a small number of bad pixels. A large number of bad pixels can cause problems in appearance, but a small number of pixels doesn't affect the computer performance.

Therefore Samsung observes and manages the following dot principles:

- Bright dot : 2 or less
- Black dot : 4 or less
- Combination of Bright and Dark : 4 or less



Instructions for Cleaning the LCD

Clean the LCD panel with a soft cloth lightly moistened with computer cleansing detergent moving in one direction.

Cleaning the LCD panel with excessive force can damage the LCD.

The BIOS Setup enables you to configure your computer hardware according to your needs.

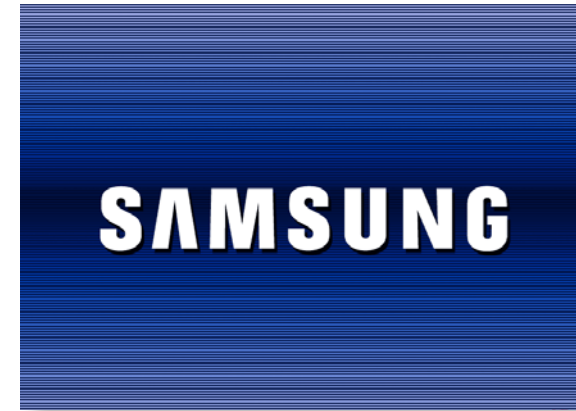


- Use the BIOS setup to define a boot password, change the booting priority, or add a new device.
- Since incorrect settings may cause your system to malfunction or crash, take care when configuring the BIOS.
- The functions of the BIOS setup are subject to change for product function enhancement purposes.
- The BIOS Setup menus and items may differ depending on your computer model.

Entering the BIOS Setup

1 Turn the computer on.


2 When the booting screen (SAMSUNG logo) appears, press the **F2** key to enter the BIOS Setup.

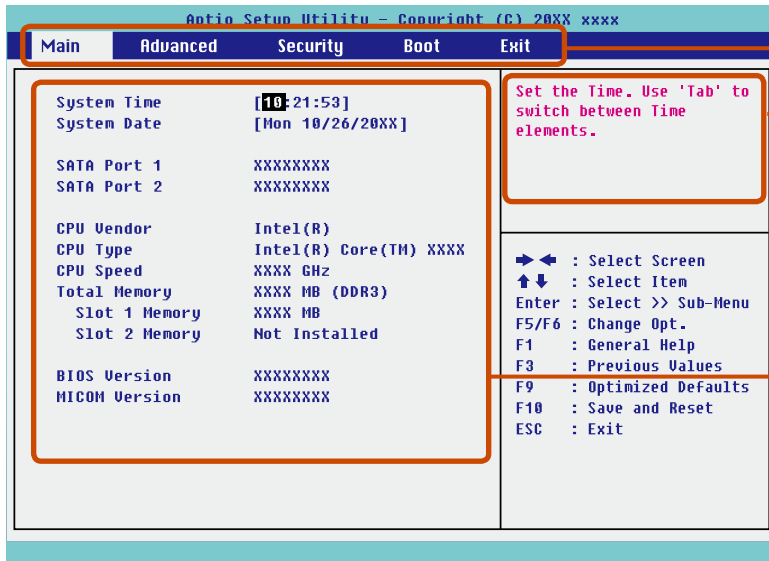


Press the **F12** key while the booting screen(SAMSUNG logo) appears, the system will try to boot from the network.

3 After a moment, the BIOS setup screen appears. The items in the BIOS setup may differ depending on the product.

The BIOS Setup Screen

 The BIOS Setup menus and items may differ depending on your computer model.



Setup Menu

Help












Help for the selected item appears automatically.

Setup Items

Setup Menu	Description
Main	Used to change the basic system and environment settings.
Advanced	Used to configure advanced functions on your computer for devices and chipsets.
Security	Used to configure security functions, including passwords.
Boot	Used to set the boot priority and other boot options.
Exit	Used to exit the Setup either saving the changes or not.

System Setup Keys

In the Setup, you have to use the keyboard.

F1		Press to view the Setup Help.
Up & Down Keys	 	Press to move up and down.
F5/F6	 	Press to change the item value.
F9		Press to load the default Setup settings.
ESC		Press to return to a higher level menu or to move to the Exit menu.
Left & Right Keys	 	Press to move to another menu.
Enter		Press to select an item or to enter a sub menu.
F10		Press to save the changes and exit Setup.



The keyboard image may differ from the actual keyboard.

When setting a password, you have to enter a password to use the computer or enter the BIOS Setup.

By configuring a password, you can restrict system access to authorized users only and protect data and files saved on the computer.



- Do not lose or forget your password.
- If you have forgotten your password, contact a Samsung service center. In this case, a service fee will be charged.

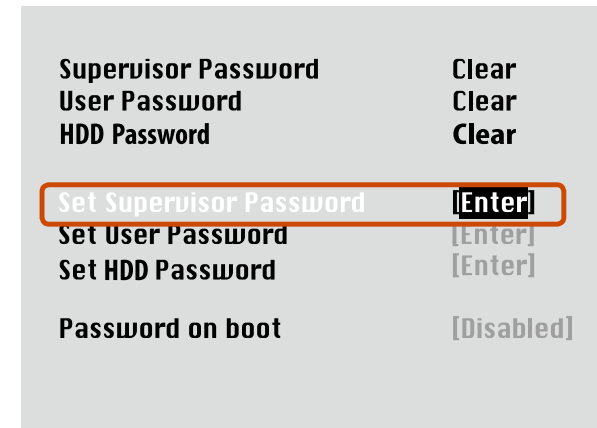
Setting a Supervisor Password

A Supervisor Password is required to turn the computer on or to start the System Setup.

When setting a Supervisor Password, users other than a supervisor cannot use the computer.

- 1 Select the **Security** menu in the BIOS Setup.

- 2 In the **Set Supervisor Password** item, press <Enter>.



- 3 Enter a password, press <Enter>, re-enter the password for confirmation, and press <Enter> again.

The password can be up to 8 alphanumeric characters. Special characters are not allowed.

- 4 The supervisor password has been set.
The supervisor password is required to turn the computer on or to enter the BIOS Setup.



For some models, if the password entered message appears in the **Setup Notice** window, the settings are not complete until the <Enter> key is pressed.

Setting a Boot Password

Setting a User Password

Users can start the system with a user password, but cannot enter the System Setup. By doing this, you can prevent other users from entering Setup.

Before configuring a user password, a **supervisor password** must have been configured. Deactivating the supervisor password also deactivates the user password.

In the **Set User Password** item, press <Enter> and complete the procedures from Step 3 of Setting a Supervisor Password.

Setting Up a Boot Password

To setup a boot password, the administrator password (**Set Supervisor Password**) should be set in advance.

Set the **Password on boot** item to **Enabled**.

Once a boot password is set, you have to enter a password to boot up the computer.

Setting up a Hard Disk Drive Password (Optional)

A supervisor password must be set using the Set Supervisor Password menu.

If you set a password for a hard disk drive, it cannot be accessed from another computer.

Press <Enter> in the **Set HDD Password** item and define a password as described in Step 3 of the Setting up the Supervisor Password.



- The hard disk drive password setting function is not provided for some models.

- **Changing the hard disk drive password**

For security purposes, you can only change a hard disk drive password after restarting the computer by pressing the computer **Power** button.

If you cannot change the hard disk drive password or the **HDD Password Frozen** message appears when entering the BIOS Setup and then selecting **Security > HDD Password**, press the **Power** button to turn the computer on again.

Deactivating the Password


- 1 Press <**Enter**> on the password to be deactivated. For example, to deactivate a supervisor password in the **Set Supervisor Password** item, press <**Enter**>.
- 2 In the **Enter Current Password** item, enter the currently configured password and press <**Enter**>.
- 3 Leave the **Enter New Password** item field empty, and press <**Enter**>.
- 4 Leave the **Confirm New Password** field empty, and press <**Enter**>.

The password is deactivated.



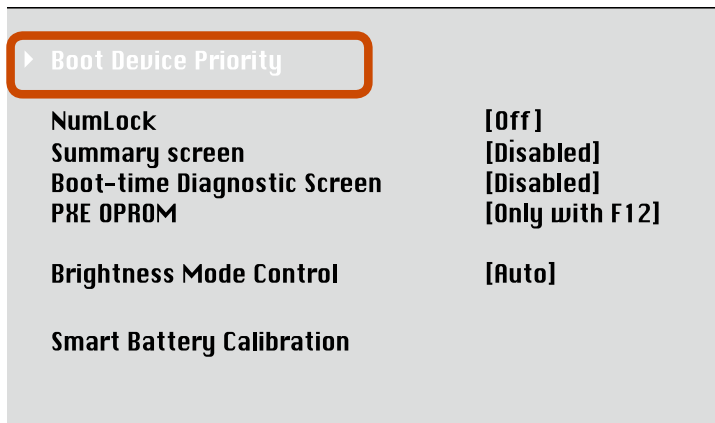
For some models the password is only canceled if the <**Enter**> key is pressed in the **Setup Notice** window.

This computer is configured to boot from an external-type ODD first. As an example, the procedures to change the highest boot priority device to the hard disk drive are described below.

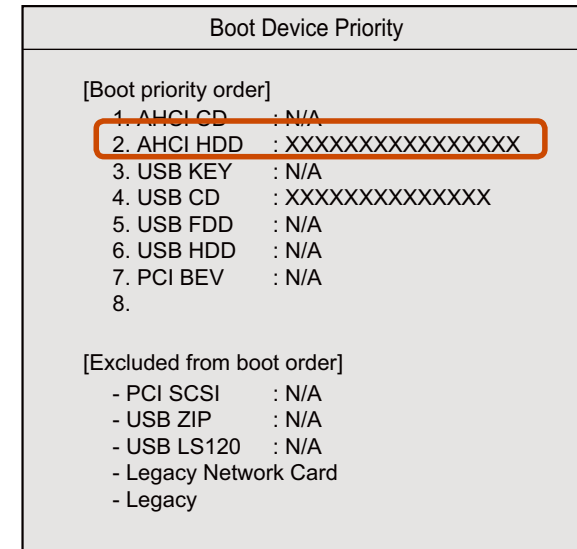
 The screen images in this document may differ from actual product.

1 Select the **Boot** menu in the BIOS Setup.

2 Press <Enter> on the **Boot Device Priority** item.



3 Press the down key (↓) to move to the **AHCI HDD** item and press the **F6** key to move up to the top item.



4 Press the **F10** key to save the settings and exit Setup.
The highest boot priority device is now set to the Hard Drive.

A memory is installed in the memory slot at the bottom of this computer. The procedures to replace the memory are described below.



- Replace new memory only after shutting the computer down completely. Do not replace memory when the computer is in Sleep mode. Disconnect main power plug and remove the battery before continuing.
- The memory compartment cover may differ from the figure below.

Replacing the Memory

- 1 Remove the screw on the memory compartment cover at the bottom of the computer using a screw driver.



- 2 Pull the memory module latches outward. The memory module will pop up. Remove the memory module out at an angle of 30 degrees.



- 3 Insert a new memory module into the memory slot at an angle of approximately 30 degrees aligning it to the angle of the memory slot.



- 4 Push the memory module down so that it is completely fixed. If the memory does not fit easily, push the memory module down while pulling the memory module latches outward.



- 5 Close the memory compartment cover and fasten the screw.

Please refer to the following instructions when running the computer on battery power without connecting the AC power.

A Lithium-Ion smart battery is supplied with this computer.



- Carefully read and follow the precautions printed on the battery before using the battery.
- Before using your computer for the first time after purchasing it, charge the battery completely.

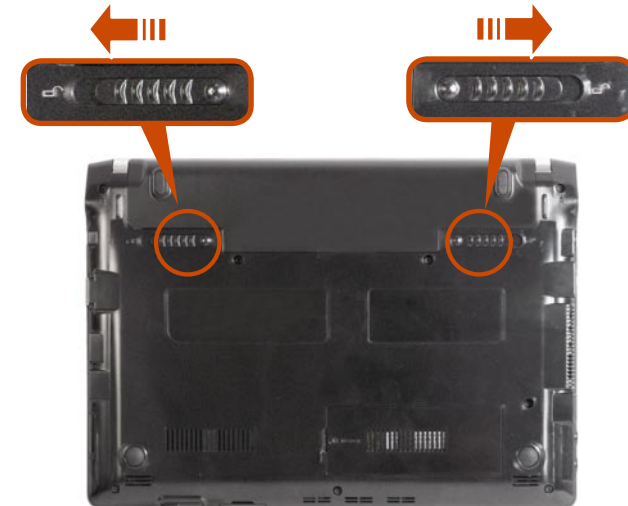


Precautions

- Use only chargers specified in the User Manual.
- Never heat the battery pack, put it near or in a fire or use at a temperature higher than 60°C, as this may cause fire.
- Never cause a short circuit between the battery pack terminals or disassemble the battery pack.
- Carefully read and follow the precautions printed on the battery and the safety instructions in the User Manual before using the battery.
- Please refer to the system operation environment of this manual and operate and store the battery at room temperature.

Installing/Removing the Battery

- 1 Shutdown the system, close the LCD panel and place the computer upside down on a flat surface.
- 2 Pull the two battery latches **outwards** , then remove the battery.



- 3 To install the battery again, slide the battery into the system. The battery latches move inwards and fix the battery automatically.

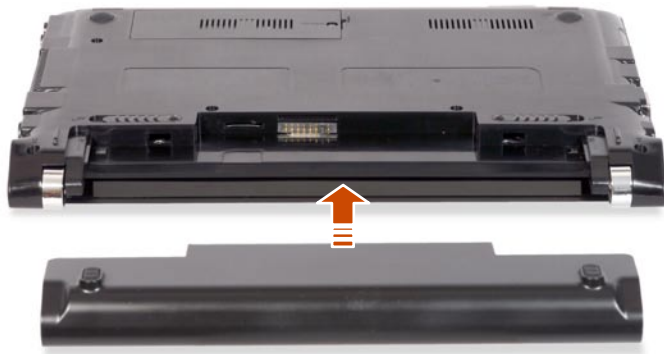


Check if the battery latch has been moved inwards.

Charging the Battery

- 1 Attach the battery and connect the AC adapter to the DC-in jack of the computer.

The battery will then start charging.



- 2 When charging is complete, the Charge LED turns green.

Status	Charge LED
Charging	 Red or Orange
Charging complete	 Green or Blue
AC adapter not connected	 Off

Measuring the Remaining Battery Charge

You can view the battery charge status by completing the following procedures.

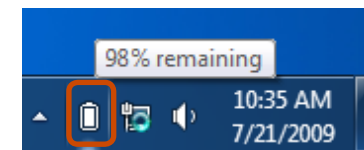
To use the shortcut key to view

Press the **Fn** + **F2** keys on the keyboard. The remaining battery charge (%) will be displayed for a moment.

You can only view the charge status in this way when Easy Display Manager is installed on your computer.

Confirming the battery charge in the Taskbar

Disconnect the AC adapter and move the mouse cursor over the battery icon in the system tray of the Taskbar to confirm the remaining battery charge.



Battery Warning

If the battery residual amount is 3~5%, the computer automatically shuts down after saving the data. The battery residual amount may vary depending on the computer model.


Battery Usage Time Information

A battery is an expendable supply, so when using it over a long time, the capacity/battery life is shortened. If the battery life is reduced to under half of its initial time, we recommend purchasing a new battery.

When not using the battery for a long time, store the battery after charging it to 30-40% of its capacity. This extends the battery life time.

Extending the Battery Usage Time

Decreasing the LCD Brightness

Press the **Fn** +  keys on the keyboard to decrease the LCD brightness to extend the battery usage time.

Using Battery Manager (Optional)


Battery Manager is a power management program that enables using the battery power efficiently. You can select an optimized power mode according to your requirements.



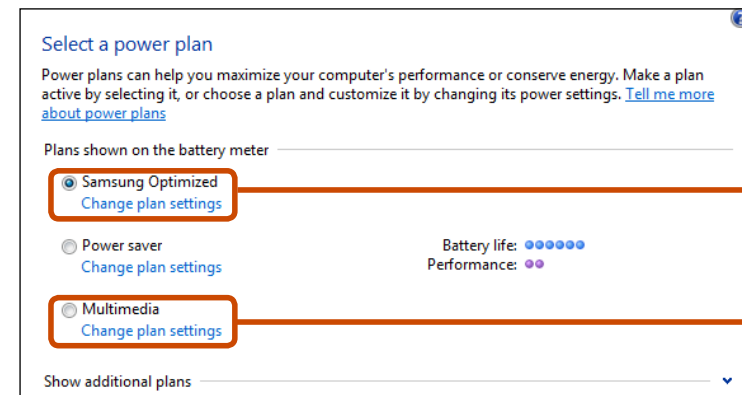
Battery Manager is optional and may not be supported depending on your model.

► For Windows 7/Vista

- 1 Click **Start > Control Panel > Hardware and Sound > Power Options**.

Alternatively, right-click the power measuring device icon  in the notification area of the taskbar and select **Power Options**.

- 2 If the following screen appears, select one of the modes.



Samsung Optimized


Multimedia

Samsung Optimized

This mode is appropriate for normal conditions. It maximizes the system performance when the computer is running on AC power while maximizing the battery usage time when the computer is running on battery power.

Multimedia

This mode is appropriate for a multimedia environment that requires maximum system performance. Therefore, the battery usage time may be reduced in this mode.

 Multimedia mode is only supported in Windows Vista.

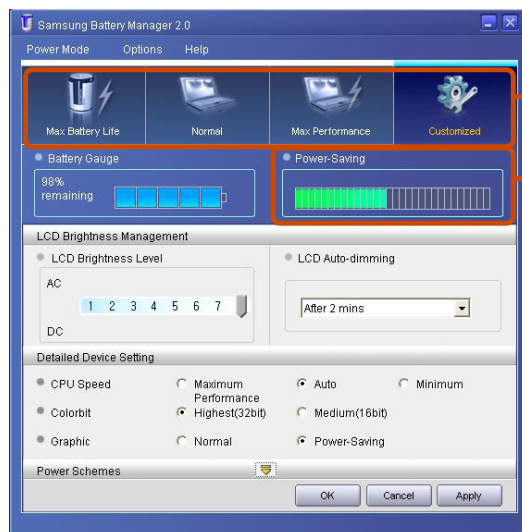
Using the Easy Battery Manager power options

To use the Easy Battery Manager power options after reinstalling Windows, you have to install the Easy Battery Manager manually using the system software media.

Since power options in Easy Battery Manager aim at maximizing the battery usage time, programs requiring high performance may slow down when using the battery. In this case, it is recommended connecting the AC adapter or selecting Power Saver.

► For Windows XP

Click **Start > All Programs > Samsung > Samsung Battery Manager > Samsung Battery Manager**.



Select Power Mode

Power-saving Effect

Maximum Battery Mode

This mode is appropriate for the environment that requires maximum battery lifetime. The system performance may be degraded in this mode.

General Mode

This mode is appropriate for the regular environment and it optimizes the performance of the system and battery.

Maximum Performance Mode

This mode is appropriate for the environment that requires maximum system performance. The battery life may get shorter in this mode.

User Settings Mode

This mode allows you to configure the detailed settings. You can set LCD brightness, power status, and color quality.



• What is the Power-saving Effect?

This product displays the battery life in each power mode. The higher the power saving effect increases, the longer the graph bar is displayed.

• When Using Games or Multimedia

The system may not operate properly in maximum battery mode. It is recommended to connect the AC adapter to the system or to use the system in general mode.