



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.

BIOS Setup

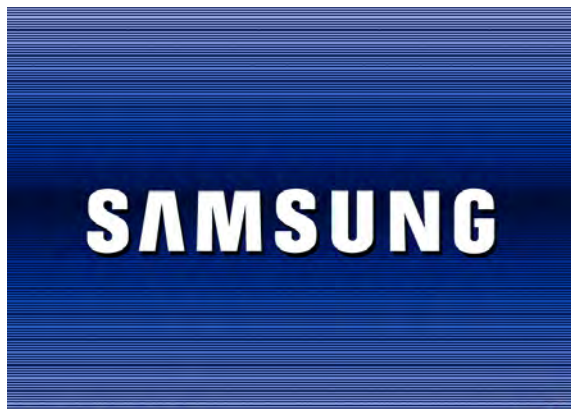
The BIOS Setup enables you to configure your computer hardware according to your needs.

- 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

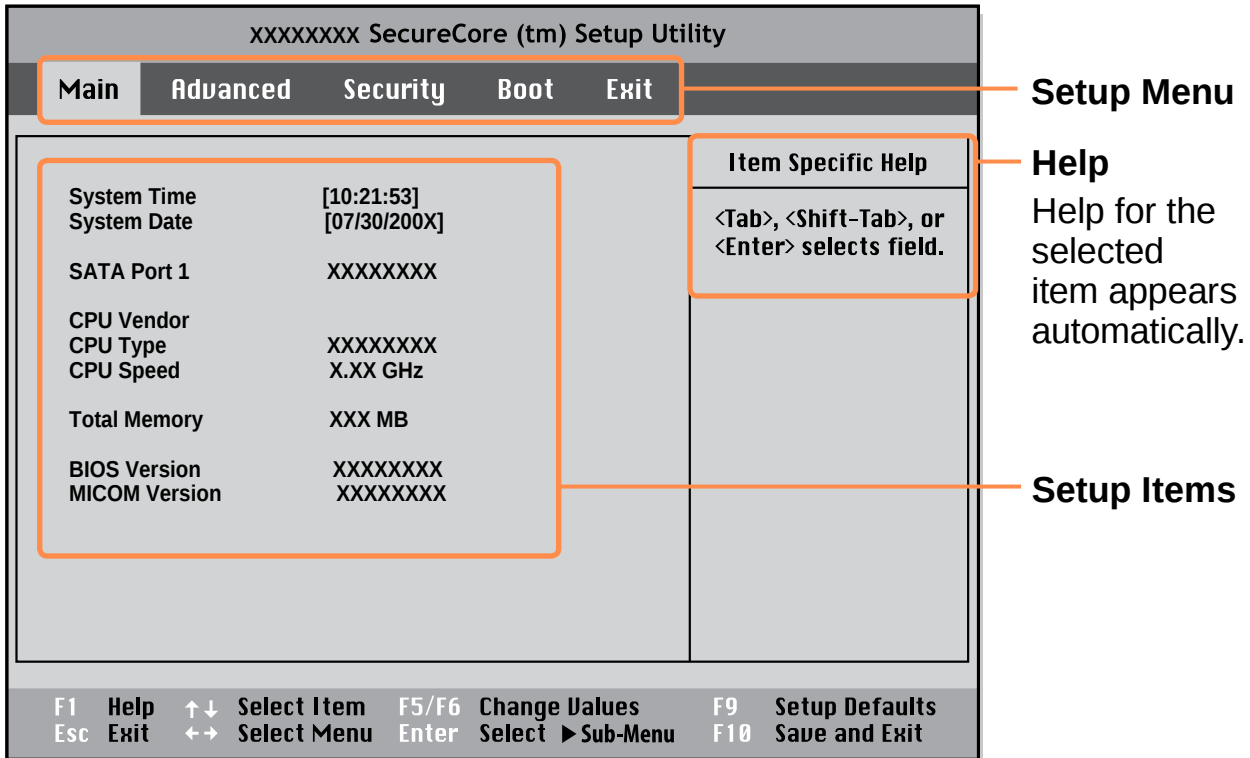
- 1 Turn the computer on.
- 2 When the booting screen (SAMSUNG logo) appears, press the **F2** key to enter the BIOS Setup.



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



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 and color may differ from the actual keyboard.

Setting a Boot Password

When setting a password, you have to enter the 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.

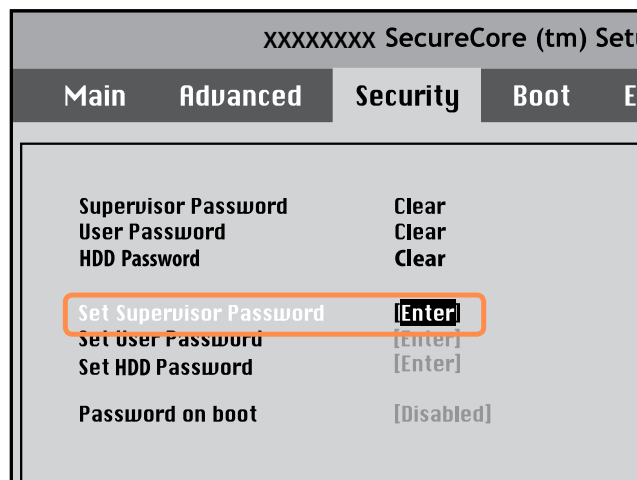
Setting a Supervisor Password

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

When setting a Supervisor Password, users other than supervisors 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** When a message confirming the password configuration appears in the **Setup Notice** window, press <Enter>.

The supervisor password has been set.

The supervisor password is required to turn the computer on or to enter the BIOS Setup.

Setting a User Password

The User Password restricts access to the computer or for configuring the BIOS Setup, like a Supervisor Password. However, the Setup items that can be configured with a User Password are restricted, unlike for a Supervisor Password.

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 the 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 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>.
- 5 In the **Setup Notice** window, press <Enter>.
The password is deactivated.

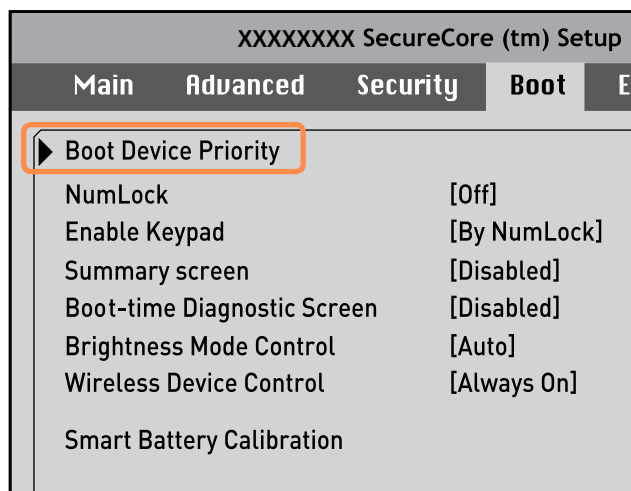
Changing the Boot Priority

This computer is configured to boot from an external-type ODD first.

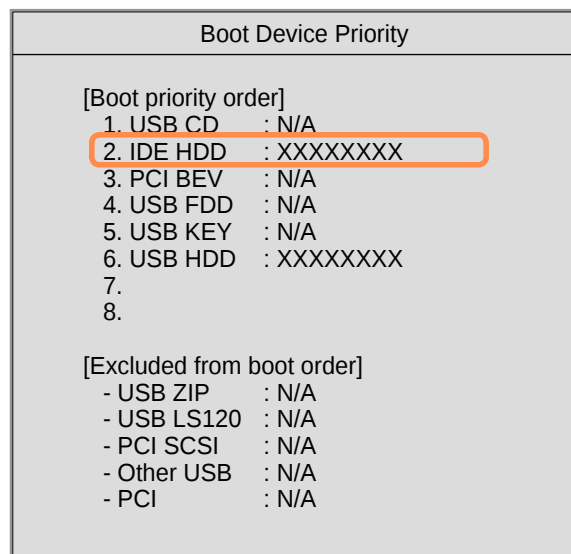
This chapter describes how to change the boot priority so that the computer boots from the hard disk drive first.

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 **IDE HDD** item and press the **F6** key to move the item to the top.



4 Press the **F10** key to save the settings and exit Setup.

The highest boot priority device is now set to the Hard Drive.

Upgrading Memory

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.
- Only use the same type of memory as specified in the Product Specification.

Replacing the Memory

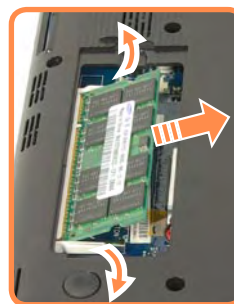
- 1** Remove the screw on the memory compartment cover at the bottom of the computer using a screw driver.



Fixing Screw

- 2** Pull the memory module latches outward. The memory module will pop up.

Remove the memory module out at an angle of 30 degrees.

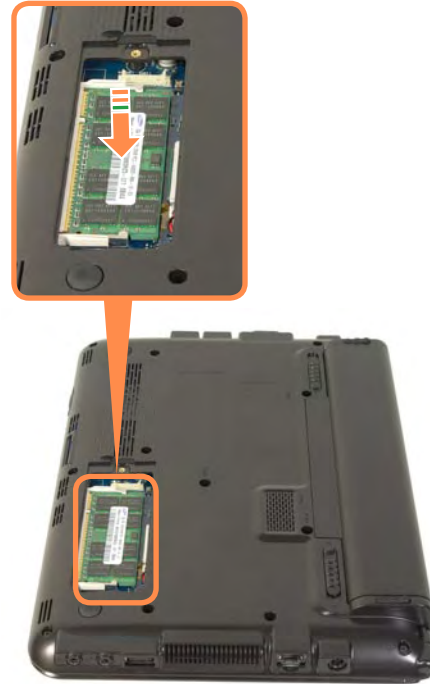


- 3** Insert a new memory module into the memory slot at an angle of approximately 30 degrees aligning it to the angle of the memory slot.



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.

Battery

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.



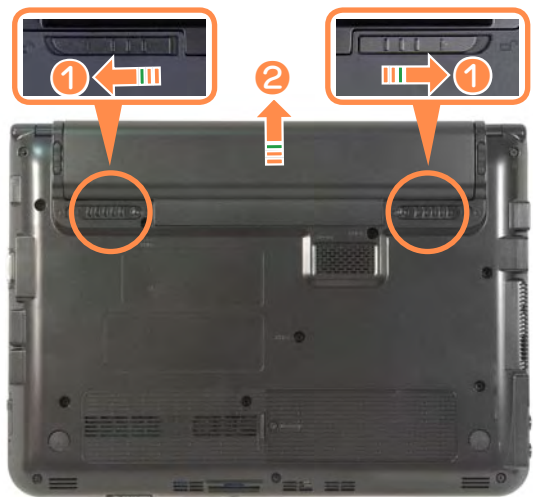
Precautions

- 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	Amber
Charging complete	Green
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** +  keys on the keyboard. The remaining battery charge (%) will displayed for a moment.

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

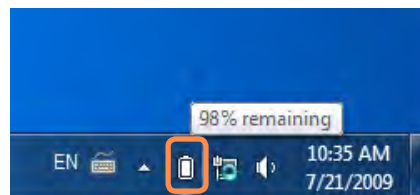


Battery Warning

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.

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 Lifetime 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.

Disabling Unused Devices (Only for Windows XP)

If you turn off unused devices, battery usage time will improve.

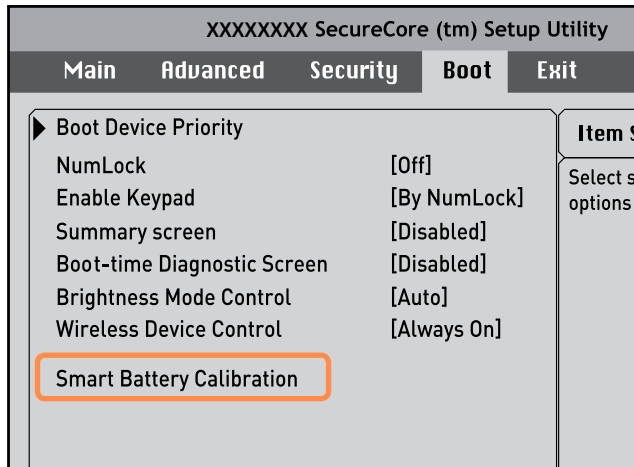
- 1** Click Device Manager from **Start > Control Panel > Performance and Maintenance > Systems > Hardware** tab.
- 2** Right-click the devices that you are not using and select **Disable**.

Using the Battery Calibration Function

When charging/discharging the battery repeatedly for a short time only, the battery usage time may be reduced by the difference between the actual battery charge and the remaining charge display. In this case, the actual battery charge and the remaining charge display will be the same by discharging the battery completely using the Battery Calibration function, and then recharging it again.

- 1** Disconnect the AC power adapter after turning off the computer.
- 2** Restart your computer and press the **F2** button when the Samsung logo appears, to start the BIOS Setup.

- 3** Move to the **Boot > Smart Battery Calibration** item using the direction keys and press **<Enter>**.



- 4** Highlight **Yes** in the **Battery Calibration Confirmation** window and press **<Enter>**.

The Battery Calibration function is activated and the battery is forcefully discharged. To stop the operation, press the **<Esc>** button.

This operation requires 3~5 hours depending on the battery capacity and the remaining battery charge.

Using the Security Lock Port

You can connect a Kensington lock to the Security Lock port to prevent your computer from being stolen when you need to use the computer in a public place.

To use this feature, you must purchase a Kensington lock additionally. To use the Kensington lock, refer to the product manual.

Tie the Kensington lock cable to a fixed object and install the other end of the cable to the Security Lock port.



Chapter 4.

Troubleshooting

Using Samsung Recovery Solution
(Optional)

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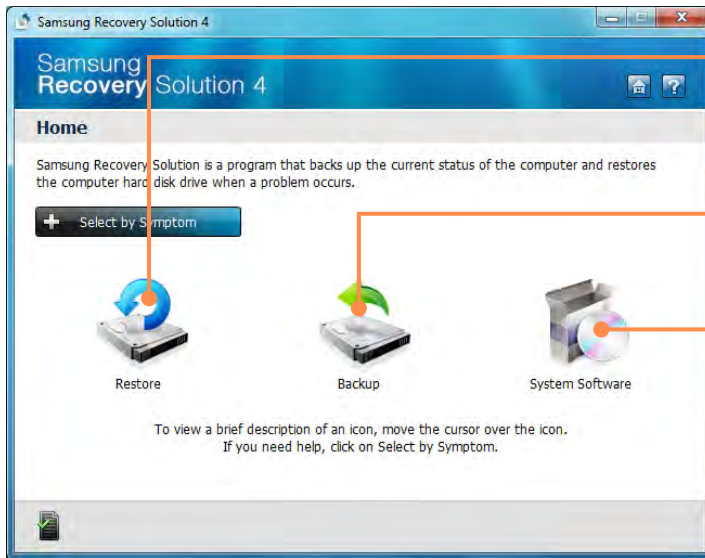
Using Samsung Recovery Solution (Optional)

Samsung Recovery Solution is a program that can **backup** your hard disk and **restores** it later when a problem occurs with your computer. It also provides a **System Software** function that enables you to install or backup device drivers and system software programs needed for your system to function properly.



- **Samsung Recovery Solution** may not be provided or the version may differ depending on the model. In addition, some functions may not be provided or may differ depending on the version. For more information on using Samsung Recovery Solution, please refer to the online help of the program.
- The screen images in this document may differ from actual product.
- If your computer does not have an internal ODD, you need an external ODD connected to your computer to use the Backup Function or Restore Function using DVDs.
- The System Software function may not be provided depending on the program version.

Samsung Recovery Solution Functions



Restore: A function that restores the computer to a previous state after a problem occurs

Backup : A function that backs up the data on the computer

System Software: A function that reinstalls or backs up device drivers and application programs needed for the system

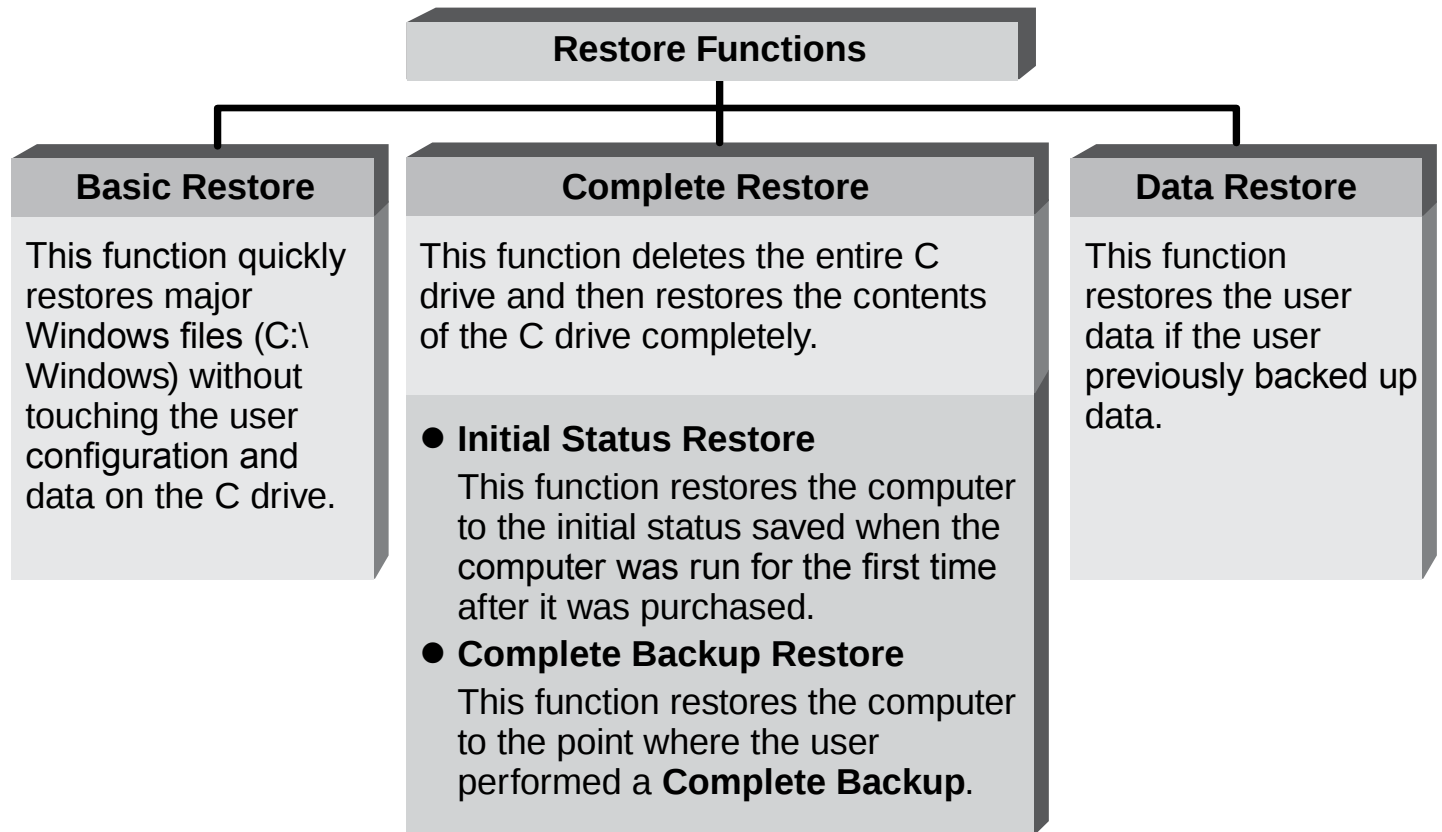
 The system software function is supported by **Samsung Recovery Solution** version 4 or later. Therefore, the function may not be supported depending on the version.



Please back up your important data as data loss may occur for the C drive while restoring/backing up the computer through Samsung Recovery Solution.

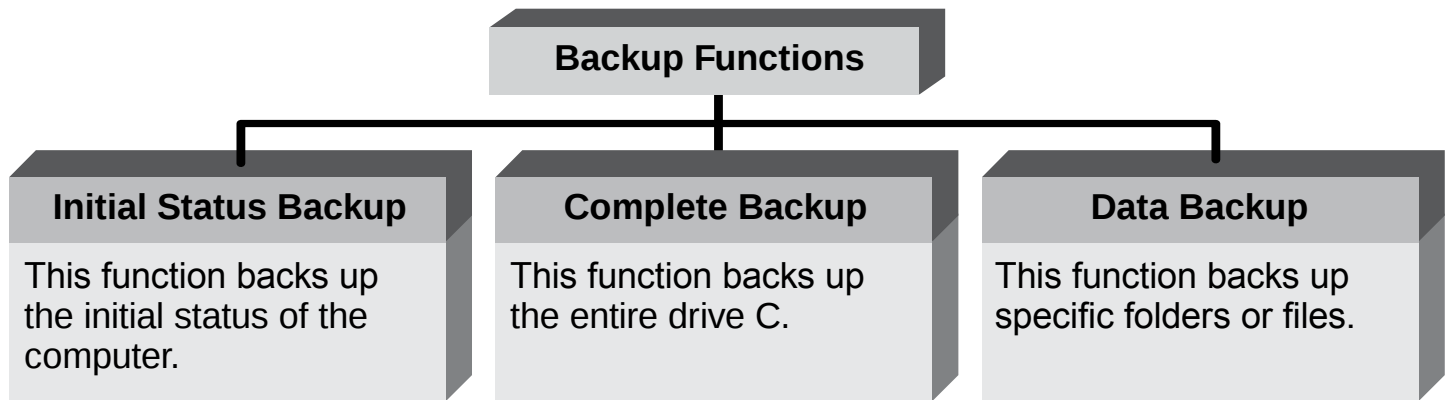
● Restore Function

Using this function, you can easily restore your computer to a previous, stable state when your computer no longer works properly or you are unable to boot up your computer due to some problem. If you have backed up data, you can restore the backup data.



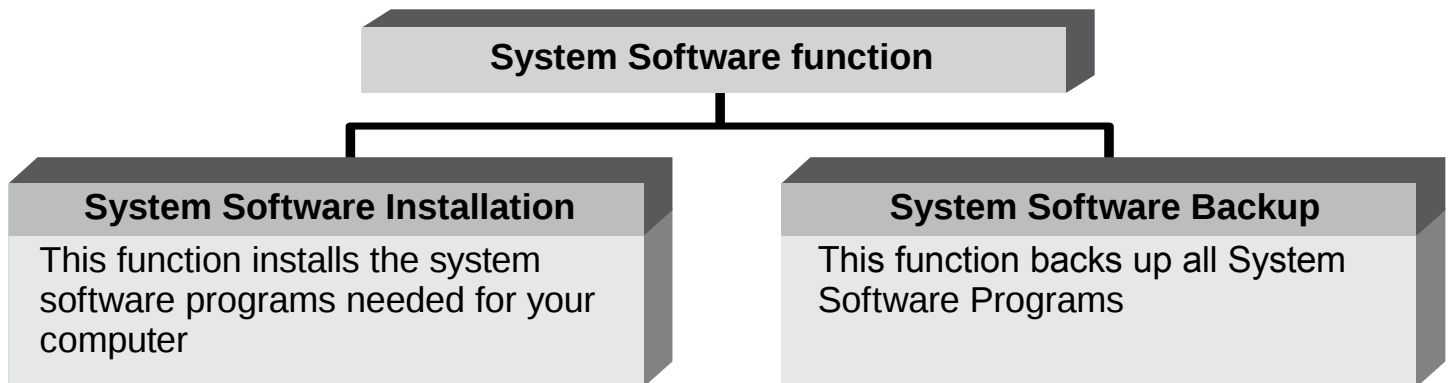
● Backup Function

You can backup the entire C drive or all your data to another **hard disk drive** or **DVD**. You can restore the backed up drive or data using the Restore function.



● System Software function

You can back up the System Software saved on the hard disk to another hard disk drive or DVD, and reinstall part or all software programs to your computer.



- The system software function is supported by **Samsung Recovery Solution** version 4 or later. Therefore, the function may not be supported depending on the version.
- You can confirm the version of the current Samsung Recovery Solution in the Samsung Recovery Solution screen.
Example) If the program name that appears in the Samsung Recovery Solution screen is **Samsung Recovery Solution 4**, it indicates that the version of the Recovery Solution is version 4. If the name is **Samsung Recovery Solution III**, it indicates that the version of the Recovery Solution is version 3.

Restore Function

Not only can you use Samsung Recovery Solution when Windows is running, but also when you are unable to boot up into Windows. Let's learn how to use Samsung Recovery Solution.

Partition Setup & Initial Status Backup

If you turn your computer on for the first time, the Initial Status Backup function is performed after registering Windows. This function saves an image of the Initial Status of the C drive to a secure location so that users can restore the computer to the Initial Status using the Complete Restore function. An Initial Status Backup is only performed once immediately after the computer is purchased.

1 If you turn the power on for the first time, the Register Windows screen appears. If you register Windows according to the instructions on the screen, the computer will be restarted.

2 After the computer has been restarted, the **Partition Setup** screen appears.

To resize the C and D drives, adjust the partition size using the slide bar and the click **Next**.



The Partition Setup function is only available when the computer is turned on for the first time and will not be available afterwards. Once you have completed the partitioning, it cannot be resized. Partition the disk carefully.

3 The **Initial Status Backup** screen appears.

To continue the Initial Status Backup, click **Restart Now**. The computer will restart.

4 The Initial Status Backup is performed to backup the initial status of the C drive to a secure location. This backup image is used for the Complete Restore function that restores your computer to the initial status.

5 When the Initial Status Backup is complete, restart Windows.

Restoring the computer

Restore is a function that enables restoring the computer to a saved point when the computer was purchased or a user-saved point.

The Restore function provides the Basic Restore and Complete Restore options.

1 – When Windows is running:

Click **Start > All Programs > Samsung > Samsung Recovery Solution > Samsung Recovery Solution**.

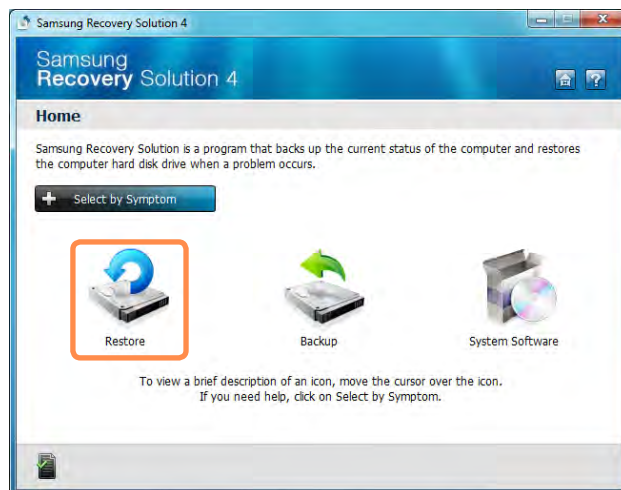
– When Windows does not start:

Turn the computer on and press the **F4** key when the boot screen (SAMSUNG logo) appears. After a moment, the computer boots up in Restoration mode and the Samsung Recovery Solution screen appears.



For computers supporting the touch screen function, the touch screen function does not work during Restore Mode. In this case, please use the touchpad or mouse.

2 If the initial menu screen appears, click **Restore**.



If you click **Select by Symptom**, the Select by Symptom menu appears. If you select a symptom, a recommended restoration option will blink. Click the restoration option to continue.

3 Select either **Basic Restore** or **Complete Restore** from the Restore menu.

- A **Basic Restore** restores the major Windows files only while maintaining the user configuration and data on the C drive in a short time.
- A **Complete Restore** deletes the entire C drive and then restores the contents of the C drive.



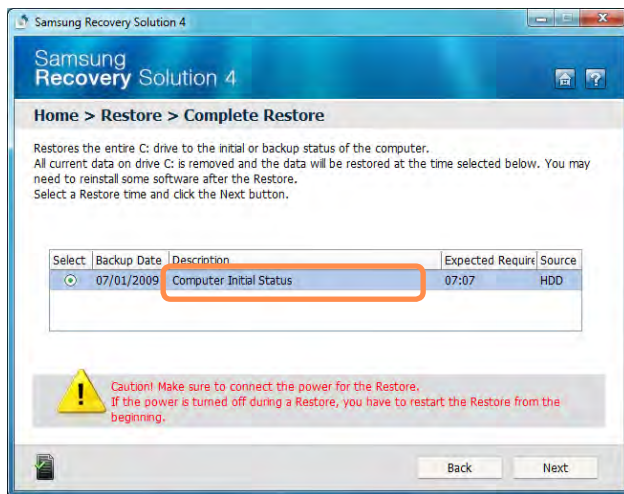
Run **Complete Restore** if the computer does not work even after **Basic Restore** has been completed.

3-1 If you have selected **Basic Restore**:

In the Basic Restore screen, click the **Next** button. The system will be restarted.

3-2 If you have selected **Complete Restore**:

In the restoration point selection screen, select the restoration point described as 'Computer Initial Status' and click the **Next** button. The system will be restarted.



4 If the Samsung Recovery Solution program is launched for the first time after purchasing the computer, the license agreement screen appears before the restoration is started. Read the agreement and click **Agree** to continue.

5 The computer boots up into restoration mode and the restoration progress message appears. If you click **OK**, the restoration begins. The restoration may take some time, please wait for a moment.

6 When the 'Restart the System' message appears after the restoration is complete, click **OK** to restart the system.



Make sure that the power cord is connected while the restoration is in process. The first time the computer boots up after a Complete Restore has been performed, the speed of the boot process may be slowed down due to the system optimization process. At this time, do not shut the computer down by force.



Since a Complete Restore deletes all user data as well as additionally installed programs, please backup your important data first using the Data Backup function, before running Complete Restore.

Backup Function

Complete Backup/Restore

A **Complete Backup** saves the complete image of the C drive onto another drive or DVD. A **Complete Restore** restores the image file saved by the Complete Backup onto the C drive.

● Complete Backup



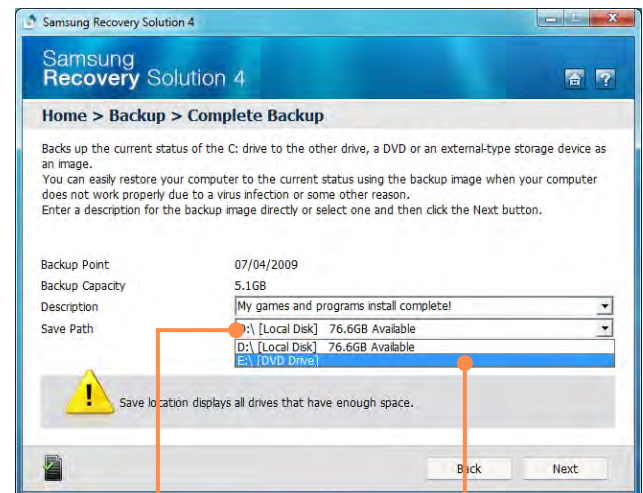
If you run Complete Backup using a DVD, you can restore the computer even when a problem occurs with the hard disk or when the restoration area is removed.

1 Click **Start > All Programs > Samsung > Samsung Recovery Solution > Samsung Recovery Solution**.

2 When the initial menu screen appears, click **Backup**.

3 Click **Complete Backup** in the backup menu.

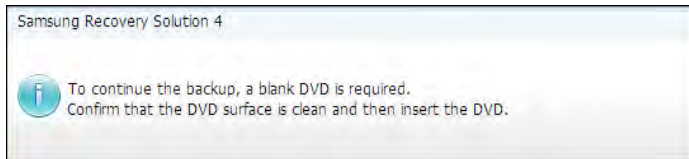
4 Enter a description for the backup regarding the current computer status in the Description field so that you can easily recognize it later, and specify the Save Path. If your computer has a DVD-Writer, you can specify the DVD drive as the Save Path.



Select Drive D.

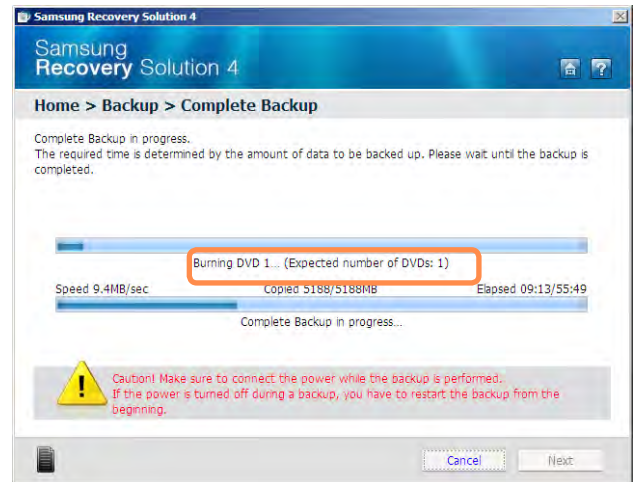
Select the DVD drive.

- 5 If you click the **Next** button, the system restarts in restoration mode and the **Complete Backup** begins. If you have selected the DVD drive as the Save Path, the “Insert a blank DVD” message appears. Insert a blank DVD and click the **OK** button.



Samsung Recovery Solution supports DVD+R, DVD-R, DVD+RW, and DVD-RW, but does not support CD-R, CD-RW, DVD-RAM, DVD-DL (Dual Layer), HD-DVD, and Blu-Ray.

- 6 The Complete Backup begins. If multiple DVDs are required, the expected number of DVDs is displayed in the progress screen. Whenever burning a DVD is completed, the “Insert the next DVD” message will appear. Continue the backup according to the instructions.



- 7 When the ‘Restart the System’ message appears after the backup is complete, click **OK** to restart the system.

● Complete Restore

1 – When backing up onto DVD

Turn the computer on and insert the backup DVD into the DVD drive.

If there are multiple backup DVDs, insert the first DVD.

– When backing up to another drive

Proceed to Step 2.

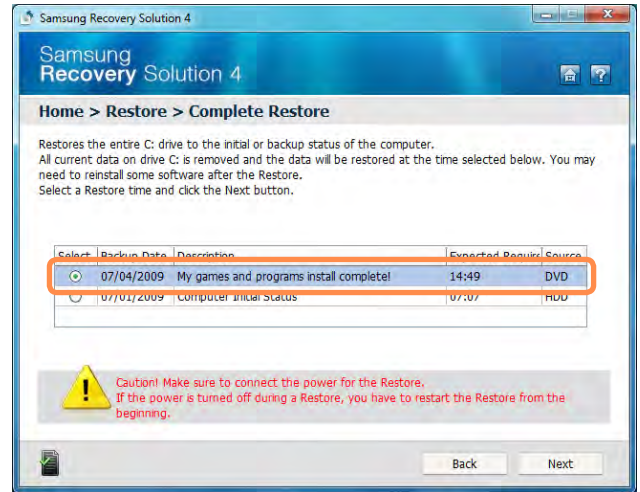
2 Click **Start > All Programs > Samsung > Samsung Recovery Solution > Samsung Recovery Solution**.



When you cannot start Windows, turn the computer on and press the **F4** key in the boot screen to enter restoration mode.

3 When the initial menu screen appears, click **Restore** and then click **Complete Restore**.

4 Select a **Complete Backup** restoration point in the restoration point selection screen and click the **Next** button. The system is restarted.



5 The restoration progress message appears after the computer boots up in restoration mode. If you click **OK**, the restoration begins.



If multiple DVDs have been used for a Complete Backup, whenever burning a DVD is completed, the “Insert the next DVD” message will appear.

6 When the ‘Restart the System’ message appears after the restoration is complete, click **OK** to restart the system. The Complete Restore has been completed.

Data Backup/Restore

Data Backup enables you to save specific files or folders onto another drive or DVD. **Data Restore** enables you to restore data using the data saved by a Data Backup when data is lost. This guide describes the Backup and Restore procedures on the basis of backing up and restoring by using DVD.

● Data Backup

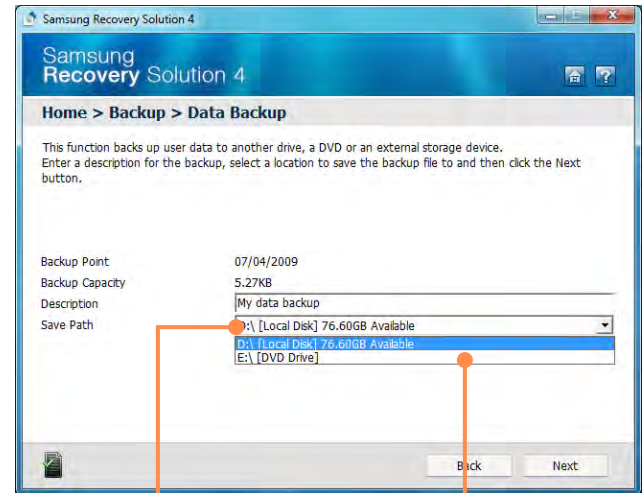
- 1 Click **Start > All Programs > Samsung > Samsung Recovery Solution > Samsung Recovery Solution**.



When you cannot start Windows, turn the computer on and press the **F4** key in the boot screen to enter restoration mode.

- 2 When the initial menu screen appears, click **Backup** and then click **Data Backup**.
- 3 In the data selection screen, select either **Basic Selection** or **Select from all**, select a folder or file to be backed up, and then click the **Next** button.

- 4 Enter a description for the backup in the **Description** field so that you can easily recognize it later and specify the **Save Path**. If your computer has a DVD-Writer, you can specify the DVD drive as the Save Path.



Select Drive D.

Select the DVD drive.



If you have specified a hard disk drive or a removable disk as the Save Path, the **SamsungRecovery\SamsungData** folder is created on the corresponding drive (e.g. D:\) and the data is saved to the folder. Take care to not delete the folder by mistake or on purpose.

5 If you click the **Next** button, the Data Backup begins. If you have selected the DVD drive as the Save Path, the “Insert a blank DVD” message appears. Insert a blank DVD and click the **OK** button.

6 The “Backup is completed” message appears.

● Data Restore

1 – When backing up onto DVD

Turn the computer on and insert the backup DVD into the DVD drive.

– When backing up to another drive

Proceed to Step 2.

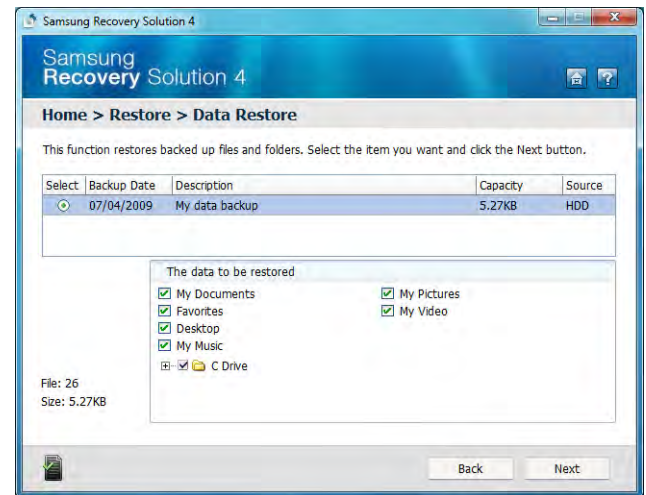
2 Click **Start > All Programs > Samsung > Samsung Recovery Solution > Samsung Recovery Solution**.



When you cannot start Windows, turn the computer on and press the **F4** key in the boot screen to enter restoration mode.

3 When the initial menu screen appears, click **Restore** and then click **Data Restore**.

4 Select a backup item to be restored in the backup list and click the **Next** button.



5 Select a folder for the restoration and click the **Next** button. Data Restore begins.

6 When Data Restore is completed, check if the data has been restored to the specified folder.

System Software Function

Using System Software

The System Software function is a function that enables you to reinstall device drivers and System Software Programs or back up those programs.



The system software function is supported by **Samsung Recovery Solution** version 4 or later. Therefore, the function may not be supported depending on the version.

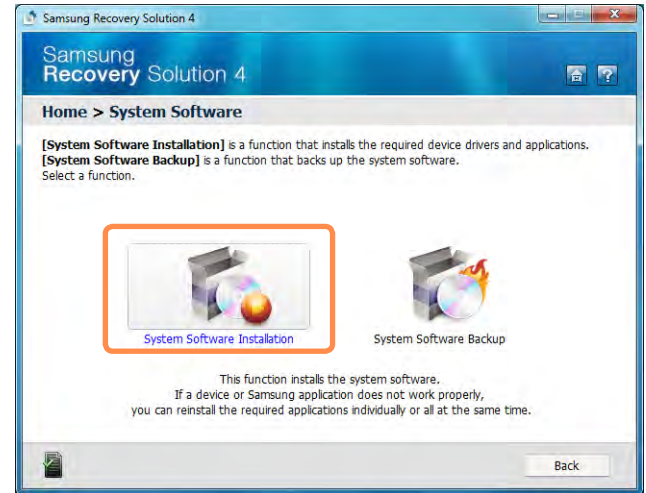


The System Software Installation Function only works in Microsoft Windows.

● Installing System Software

1 Click **Start > All Programs > Samsung > Samsung Recovery Solution > Samsung Recovery Solution**.

2 When the initial menu screen appears, click **System Software > System Software Installation**.

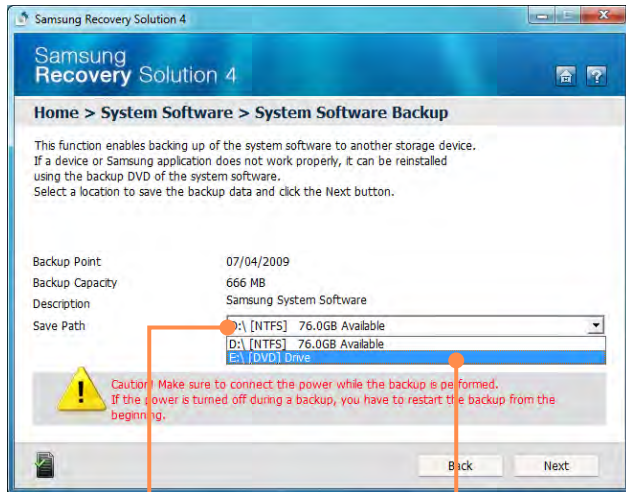


3 When the **Samsung System Software** screen appears, check all the device drivers and application programs you want to install and then click **Install Now**.

4 After the installation is complete, the computer will restart.

● System Software Backup

- 1 Click **Start > All Programs > Samsung > Samsung Recovery Solution > Samsung Recovery Solution**.
- 2 When the initial menu screen appears, click **System Software > System Software Backup**.
- 3 Specify the Save Path. If your computer has a DVD-Writer, you can specify the DVD drive as the Save Path.



Select Drive D.

Select the DVD drive.



If you have specified a hard disk drive or a removable disk as the Save Path, the **SamsungSoftware** folder is created on the corresponding drive (e.g. D:\) and the system software programs are saved to that folder. Take care to not delete the folder.

- 4 If you click the **Next** button, the Software Backup begins. If you have selected the DVD drive as the Save Path, the “Insert a blank DVD” message appears. Insert a blank DVD and click the **OK** button.

- 5 After the backup, the “**System Software Backup is completed**” message appears.



- If you want to install the System Software Programs backed up on the drive, run the **SoftwareMediaXX.exe** file in the **SystemSoftware** folder.
- When installing System Software Programs from the backed-up DVD, insert the DVD and follow the System Software Installation directions.
- To delete Samsung Recovery Solution, refer to the Help section of the program.

Reinstalling Windows 7

(For Windows 7. For supported models only)

You can reinstall Windows using the **SYSTEM RECOVERY MEDIA** for Windows when Windows is no longer working properly. (For models supplied with a SYSTEM RECOVERY MEDIA.)

For models supplied with the Samsung Recovery Solution, you can reinstall Windows using the Samsung Recovery Solution.

These descriptions are for Windows 7 and for supported models only.

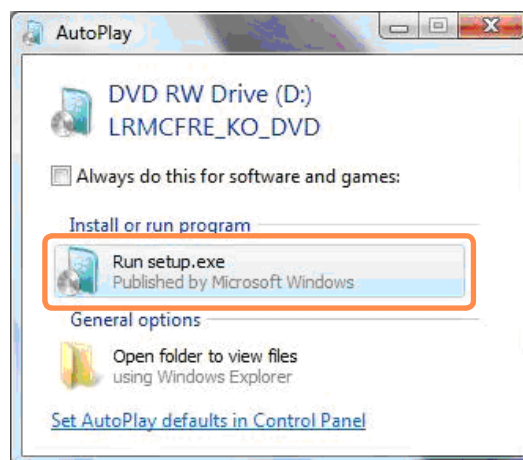
- A **SYSTEM RECOVERY MEDIA** may not be supplied depending on your computer model.
- If you cannot start Windows, or if you want to delete all existing data and reinstall Windows, install Windows according to the descriptions in **[Reinstalling when Windows does not start]**.
- To reinstall Windows using SYSTEM RECOVERY MEDIA, an external-type ODD must be connected before turning the computer on. The following descriptions assume that an external ODD is connected.

! Reinstalling Windows may delete data (files and programs) saved on the hard disk drive. Make sure to backup all important data. Samsung Electronics shall not be held liable for any loss of data.

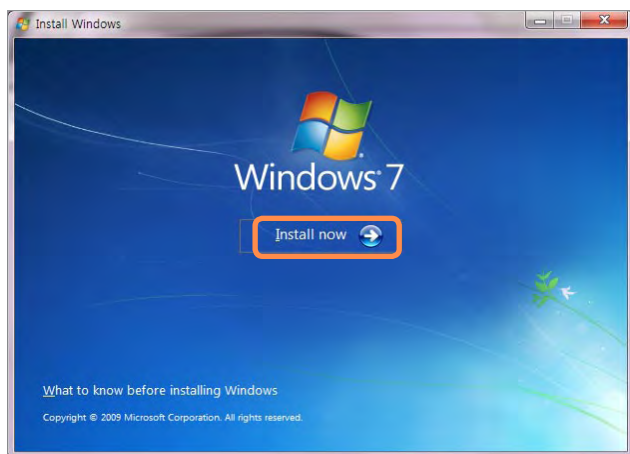
Reinstalling in Windows

- 1 Insert the **SYSTEM RECOVERY MEDIA** into the DVD drive.
- 2 When the **AutoPlay** window appears, select **Run setup.exe** and click **Allow**.

✎ This screen may not appear depending on the security level.



- 3 If the Select Windows Installation window appears, click **Install Now**. When the Select Update window appears, click on the relevant item.



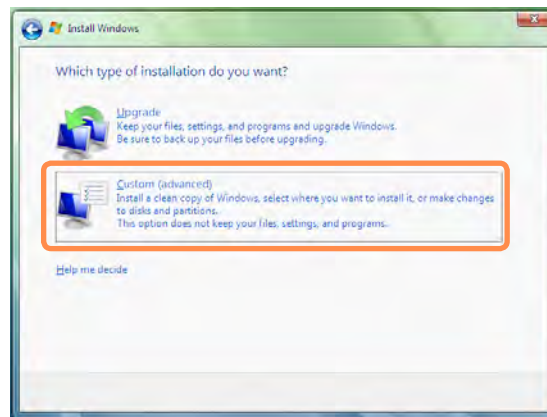
Windows 7 installation selection window

- 4 If the User Agreement screen appears, select **I accept the license terms** and then click **Next**.



For Windows 7, this screen may not appear depending on the version.

- 5 The following window appears, select an installation option.



If you click **Custom**, the procedures from Step 6 continue sequentially.

If you click **Upgrade**, the procedures from Step 7 continue sequentially.



For Windows 7, this screen may not appear depending on the version.



- If you select **Go online to get the latest updates for installation** in the Select Update window, the latest updates are installed and Step 4 follows. At this time, the computer must be connected to the Internet.
- For Windows 7, the screen asking for the operating system to be installed may appear depending on the version. If you click the **Next** button, the screen of Step 4 appears.



- **Custom**

Select this option to **Reinstall Windows**. You have to reinstall all necessary device drivers and programs after the Custom installation. In addition, unnecessary folders and files may remain on the hard disk drives after the installation (e.g. C:\Windows.old, etc.).

- **Upgrade**

Select this option to **Upgrade Windows** while maintaining current files, configurations and programs. Although you therefore do not need to reinstall the device drivers and programs, some programs may not work properly after the upgrade.

6 When a window appears asking for the location to install the operating system to, select a disk drive partition and click the **Next** button.



Drive D includes an area to save the backup image used by Samsung Recovery Solution. Installing Windows to drive C is recommended.



When previous Windows installation files are in the selected partition, a message appears informing you that the files and folders will be moved to the Windows.old folder. Click the **OK** button.

7 The Windows installation continues.

The computer will restart 3 times during the installation. If the **Press any key to boot from CD or DVD...** message appears after a restart, do not press any button.

8 Register a user according to the instructions on the Windows screen.

9 When the registration is complete, the Windows Desktop screen appears.



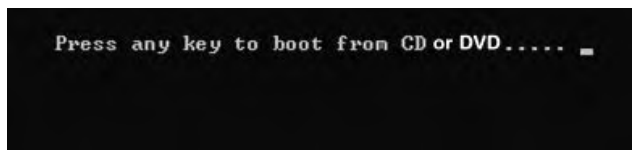
For a smooth computer operation, installing the necessary software installation is recommended.

Reinstalling when Windows does not start

When Windows does not start, boot up with the SYSTEM RECOVERY MEDIA and from there you can reinstall Windows.

1 Insert the **SYSTEM RECOVERY MEDIA** into the DVD drive and restart the computer.

2 If the **Press any key to boot from CD or DVD...** message appears while booting, press any key on the keyboard.



3 After a while, the Options windows such as Language, Time, Keyboard, etc. appear. Confirm the settings and click the **Next** button.

4 If the **Select Windows Installation** window appears, click **Install Now**.



For Windows 7, the screen asking for the operating system to be installed may appear depending on the version. If you click the **Next** button, the screen of Step 5 appears.

5 If the User Agreement screen appears, select **I accept the license terms and** then click **Next**.



For Windows 7, this screen may not appear depending on the version.

6 When the window asking for the installation type appears, click **Custom**.



For Windows 7, this screen may not appear depending on the version.

7 When a window appears asking for the location to install the operating system to, select the partition of the disk drive and then click the **Next** button.



Drive D includes an area to save the backup image used by Samsung Recovery Solution. Installing Windows to drive C is recommended.



- A If you click **Drive Options (Advanced)**, you can delete, format, create or expand a partition. Click on a function and proceed according to the instructions on the screen.
- When previous Windows installation files are in the selected partition, a message appears informing you that the files and folders will be moved to the Windows.old folder. Click the **OK** button.

8 The subsequent steps are the same as those from Step 7 of Installing in Windows.

Reinstalling Windows XP

(For Windows XP, For supported models only)

You can reinstall Windows using the SYSTEM RECOVERY MEDIA when Windows does not work properly. (For models supplied with a SYSTEM RECOVERY MEDIA.) For models supplied with the Samsung Recovery Solution, you can reinstall Windows using the Samsung Recovery Solution.

These descriptions are for Windows XP and for supported models only.



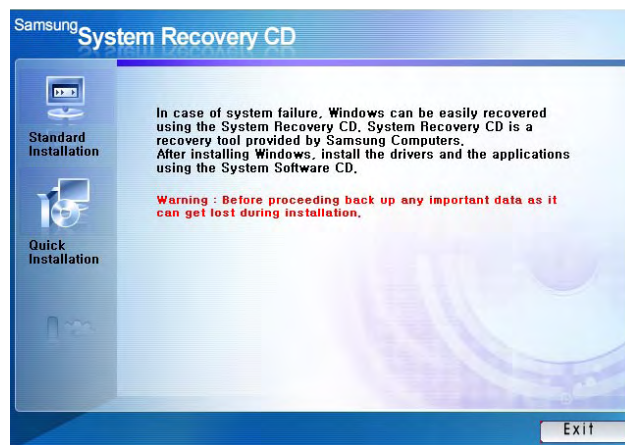
- A SYSTEM RECOVERY MEDIA may not be supplied depending on your computer model.
- The SYSTEM RECOVERY MEDIA is supplied as a CD or DVD depending on your model, and some models are printed as System Recovery CD.
- To reinstall Windows using SYSTEM RECOVERY MEDIA, an external-type ODD must be connected before turning the computer on. The following descriptions assume that an external ODD is connected.



Reinstalling Windows may delete data (files and programs) saved on the hard disk drive. Make sure to backup all important data. Samsung Electronics shall not be held liable for any loss of data.

Running SYSTEM RECOVERY MEDIA

Insert the SYSTEM RECOVERY MEDIA into the CD-ROM drive.



● Standard Installation

You can change the settings for partitioning, the installation folder, etc. during the Windows installation. However, reinstalling Windows may delete the data on the hard disk drive such as files, programs, etc. In order to minimize damage from data loss, please remember to always back up data.

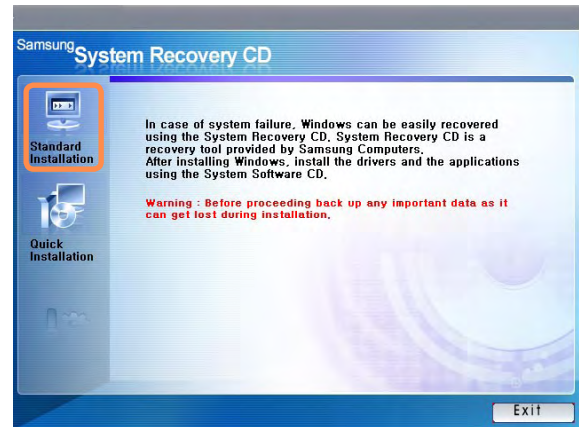
● Quick Installation

This re-installs Windows with the user data and the system configuration intact. The user data in the already existing Windows folders may be preserved as the existing Windows folders are overwritten.

Standard Installation

Explain Standard Installation option as a standard.

1 In the initial screen, click **Standard Installation**.



2 The description for the Standard Installation appears. Click **Yes**. The installation starts, and the system will be restarted after a while.



When Quick Installation is selected, Setup proceeds with Step 3 before automatically installing Windows. Quick Installation overwrites the existing Windows version, so that drivers or applications do not need to be reinstalled.

3 After the system has restarted, the message 'Press any key to boot from CD' appears. Do not press any key at this time. After a while the partition configuration screen appears. To not change the partition, press **Enter**.



- **What is partition configuration?**

Partition configuration is a function that divides the hard disk drive into one or several partitions. Note that changing the partition deletes all of the data on the hard disk drive.

- When installing Windows in the standard installation, do not install Windows XP in the Recovery partition as this partition is used as the recovery area in Samsung Recovery Solution.

If Windows is reinstalled in the Recovery partition, the system recovery function cannot be used since the recovery area is damaged.

4 Select the folder to install the Windows operating system. To delete the previous version of Windows and install in the current folder, press **L** on the keyboard.



If you press **ESC** to select another folder for the installation, new Windows folders are created causing a risk of dual booting.

5 After the installation process copies the necessary folders for the Windows installation, restart the system, and the message "Press any key to boot from CD" is displayed. You do not need to enter anything. In a moment, the Windows XP installation screen will appear to proceed with the installation.

6 When the **Regional and Language Options** window appears, click **Next**.

7 When a window that requires your name and organization pops up, enter your name and the organization and click **Next**.

8 When the **Date and Time Settings** window appears, click **Next**. Setup will continue.

9 When the system restarts to display Press any key to boot from CD, do not press any key.

When you see the Windows desktop, this means that the installation process is completed.

Reinstalling when Windows does not start

When Windows does not start, boot up with the SYSTEM RECOVERY MEDIA and from there you can reinstall Windows.

1 Insert the SYSTEM RECOVERY MEDIA into the CD-ROM drive and start the computer.

2 If the following message appears on the screen, press any key from the keyboard.

Press any key to boot from CD.....

3 Do not press any key at this time. After a while the partition screen appears. To not change the partition, press **Enter**.

4 Select the desired file system (format). To maintain the current file system, press **Enter**.

5 Select the folder to install the Windows operating system. To delete the previous version of Windows and install in the current folder, press **L** on the keyboard.

6 After the installation process copies the necessary folders for the Windows installation, restart the system, and the message “Press any key to boot from CD” is displayed. You do not need to enter anything. In a moment, the Windows XP installation screen will appear to proceed with the installation.

7 Follow the instructions of the Windows XP installation wizard to continue with the installation.

8 When the installation is complete, the computer will restart. When the system has restarted, the Press any key to boot from CD message appears. Ignore the message.

The system boots and the Windows and Windows Registration screen appears. Register Windows, following the instructions to finish the Windows installation. Remove the SYSTEM RECOVERY MEDIA and install the **device drivers** and **application programs** using **Standard Installation** from the **System Software Media**.

Questions and Answers

This section provides information on possible problems, solutions and other references for system use.



- These descriptions are written based on Windows 7, the latest operating system. Therefore, some descriptions and figures may differ from your operating system. But as the usage is similar to other Windows operating systems, you can use these descriptions for reference.
- The path may differ depending on the operating system.

Windows Related

Q When unwanted confirmation windows appear repeatedly while installing or running a program, connecting to the Internet, or when you cannot use Internet banking services.
(for the Windows 7 operating system only)

A In **Windows 7**, the frequency of the confirmation window that appears during the program installation or execution or after changing Windows settings is determined by the security level setting in the **User Account Control**. This may occur when the security level in the **User Account Control** is set to **Alarm always**.

- ① Click **Start**  > **Control Panel** > **User Accounts and Family Protection** > **User Accounts** > **Change User Accounts Control Settings**.
- ② Select a level and click the **OK** button to finish the setting.

Q The Windows Firewall setting according to the network location (for the Windows 7 operating system only)

A **Windows 7** allows different Windows firewall settings for each network location.

The following network locations are available: **Home Network**, **Company Network** and **Common Network**.

You can determine whether to use the Windows Firewall and select a firewall security setting for each location.

- ❶ If the network setting window appears in Windows 7 after setting up the IP address, select a location.
- ❷ Click **Start**  **> Control Panel > System and Security > Windows Firewall > Activate or Deactivate Windows Firewall**.
- ❸ Set up a firewall for the **Home and Company (Private) Network Location Settings** and the **Common Network Location Settings**, and click the **OK** button.

Q What Is Virtual XP?
(For Windows 7 only,
For supported models only)

A **Virtual XP** refers to a virtual operating system that allows you to run **Windows XP** virtually in the **Windows 7** environment. By using **Virtual XP**, you can use applications that do not run on **Windows 7**.

► **Requirements for Running Virtual XP**

- ❶ **Virtual XP** is only available on these three operating systems: **Windows 7 Professional**, **Ultimate**, and **Enterprise**.
- ❷ The memory must be 2 GB or more and the virtualization function of the BIOS must exist and be activated by the CPU.



For more information, refer to the Help section of the OS or visit Microsoft's website.

Q What are the restrictions of Windows 7 Starter?

- A
- ❶ The DualView function is not supported when an external display device is connected.
 - ❷ The Aero function of Windows 7 is not supported.
 - ❸ The **Set as Background** function to change the wallpaper of the Desktop is not supported.
 - ❹ Functions that are not supported by the operating system, may also not be supported by related programs such as Easy Display Manager, the graphics driver and so on.



For more information, refer to the Help section of the OS or visit Microsoft's website.

Display Related

Q The LCD screen is too dark or too bright.

- A** Turn on the LCD backlight or adjust the screen brightness.

Press **Fn** +  to turn on the LCD backlight or press **Fn** + , **Fn** +  to adjust the screen brightness.

Q The screen saver disturbs screen viewing during Media Player or video file operation.

A ► For Windows 7

Unselect **Library > More Options > Player > Allow screen saver during playback** in the Media Player.

► For Windows XP

Click **Tools > Options > Player** and then clear the **Allow screen saver during playback** in the Media Center check box.

Q In the following cases, the screen blinks or there is noise for a short time.

- Click the **Graphics Related** tab, **Change Resolution**, **Change Display Device**, **Remove the AC Adapter**, **Restart the System**, **Change Power Scheme**.

- A** This may happen while the video driver is examining the connected device. While the detection process is busy, any connected display devices may blink or some noise may occur.

Q When I connect an external display and change the settings to display the screen image on both the LCD and the external display by pressing the **Fn** +  key combination, the screen is not displayed properly.

- A** Press **Fn** +  key combination again. If the screen is still not displayed or only part of the screen is displayed by doing this, that means the LCD resolution is too low or too wide and the external display does not support the resolution.

Right-click over the Desktop, select Properties, select the Settings tab and change the resolution to 800 x 600.

Q The Taskbar on the bottom of the screen does not appear when a projector is used as the display device.

A This may happen, if the projector does not support LCD resolution. In this case change the resolution to 800 x 600 (recommended) on your computer.

Q Switching the MS-DOS command prompt to full screen mode or Windows mode by pressing the <Alt>+<Enter> keys does not operate properly.

A Pressing the <Alt>+<Enter> keys using an USB keyboard, may cause the key input to be recognized as multiple key inputs depending on the keyboard input recognition time. In this case, the MS-DOS command prompt is repeatedly switched to full screen and then to Windows several times.

Please press the <Alt>+<Enter> keys more quickly, or press the <Alt>+<Enter> keys using the system keyboard.

Q The shortcut icons are not displayed on the screen even if I press the shortcut key.

A The shortcut icons only appear when the Easy Display Manager program is installed.

Q The color is strange when the picture is displayed on the connected monitor (or projector).

A Check the monitor signal cable connection and reconnect the cable.

Sound Related

Q How can I configure the sound for video or audio chatting?

A1 Configuring the Realtek HD Audio Manager

- 1 Select **Control Panel > Realtek HD Audio Manager**.
- 2 Select the **Mic** tab.
- 3 Select the **Suppress noise** and the **Remove sound echo** items and click the **OK** button.

► For Windows 7

When using the **Remove sound echo** option, select the **Play Device > Speaker > Level** tab and set the Microphone to **Mute**.

► For Windows XP

Using **Acoustic Echo Cancellation** option keeps the Microphone Volume muted in the Playback Mixer.

A2 Playback Mixer Settings

- 1 Double-click the **Volume** icon in the Taskbar and select **Options > Properties** from the menu.
- 2 Select **Realtek HD Audio Input** in the Mixer device field, confirm that the **Microphone** is selected in the **Show the following volume controls** field, and click the **OK** button.

- 3 Select the **Microphone** item in the **Record Control** window and close the window.

Q I cannot hear my voice with the internal microphone.

- A This is because the sound from the internal microphone is removed so that the sound is not delivered to the speaker and causes feedback from the internal microphone. However, you can record the sound from the microphone normally.

► For Windows 7

When using an external microphone, select the **Play Device > Speaker > Level** tab and deselect **Mute** for the Microphone. Then you can listen to the sound from the external microphone through the speakers.

► For Windows XP

When using an external microphone, if you disable the microphone channel mute function of the play mixer, you can hear the sound input into the external microphone through the speaker.

Q Sound is recorded abnormally when I select the Remove sound echo option, connect an external microphone, select the Play Device > Speaker > Level tab and then deselect Mute for the Microphone.

A This occurs because the algorithm used to remove the echo sound regards some of the sound as an echo and removes this, as the recording is done by playing the sound from the external microphone.

► **For Windows 7**

After selecting the Remove sound echo option, please select the **Play Device > Speaker > Level** tab and select Mute for the Microphone for a normal recording.

► **For Windows XP**

In this case, select Mute in the Microphone Volume of the Playback Mixer after selecting **Acoustic Echo Cancellation** item.

Q How can I configure the Recording Mixer while broadcasting music in WinAMP? (for the Windows XP operating system only)

A1 Playback Mixer Settings

- ❶ Double-click the **Volume** icon in the Taskbar and select **Options > Properties** from the menu.
- ❷ Select **Realtek HD Audio Input** in the Mixer device field, select **Stereo Mix** in the **Show the following volume controls** field, and click the **OK** button.
- ❸ Select the **Stereo Mix** item in the **Record Control** window and close the window.

A2 Realtek HD Sound Effect Manager Settings

- ❶ Click **Start > Control Panel > Sounds, Speech, and Audio Devices > Realtek HD Sound Effect Manager**.
- ❷ Click **Microphone** tab.
- ❸ Unselect **Noise Suppression** and **Acoustic Echo Cancellation** and Click **OK**.

Q The <Wake On LAN> function

A <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).

● Using the <Wake On LAN> Function

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 > Performance and Maintenance > System > Hardware > Device Manager > Network Adapters**.

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.



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

Q When I am 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.

A When the computer exits standby/ hibernate mode, restoring the network takes about 3 seconds. When the network is restored, it operates at 100Mbps/1Gbps.

Q The Home Group function (for the Windows 7 operating system only)

A **Home Group** is a function that enables connecting all the computers at home allowing users to access the data on all computers as if accessing the data on the local computer.

If you set the first computer to use a **Home Group** as a **Home Network**, you can create a **Home Group**. A second (and more) computer can participate in the created **Home Group**. A password is required for participation and you can confirm the password on the first computer.

This function is only available between computers that have the **Windows 7** operating system installed. If an older operating system that Windows 7 is installed on a computer, the computer cannot create or participate in a **Home Group**.

In addition, using the **Home Group** function is restricted in the **Windows 7 Starter** version because of the operating system properties.

Wireless LAN Related

Q I cannot find an AP.

A Verify whether the Wireless LAN LED is on.

If it is turned off, turn it on by pressing the Wireless LAN On/Off button

(Fn + ).

Q The Wireless LAN device is operating properly, but I cannot connect to the Internet or to another computer.

This is due to an incorrect configuration, or a configuration error. Check the following:

A1 When connecting to a wireless Ad-Hoc network, check if the network name (SSID) is the same.

A2 If a network key (encryption key) is used, the AP (Access Point) and wireless Ad-Hoc network keys must be the same.

The AP network key can be configured using an AP management program. For more detailed information, ask your network administrator or product provider.

A3 Check that the device driver is installed properly. If the driver is not properly installed, you will find a yellow exclamation mark on the network icon by clicking **Device Manager > Network Adapter**.

Q The signal strength is excellent, but I cannot connect to the network.

Even if the signal strength is excellent, the network connection may not operate properly if the TCP/IP properties are not properly configured, or the network key (encryption key) is incorrect.

A1 Check that the TCP/IP properties are configured properly. When connecting to an AP, right-click the **Network Connections**  icon on the taskbar and select **Network and Sharing Center**. If you click the **View Status** next to a connected wireless network device and then click the **Detail** button, you can view the IP information.

For Windows XP, double-click the  icon and check if the IP address is properly allocated on the **Support** tab.

If the IP is not allocated properly, the IP address will be displayed as follows (e.g. 169.254.xxx.xxx).

If the network does not provide DHCP, you have to specify the correct IP address by asking your network administrator.

Even if the network provides DHCP, the server may not allocate an IP address to the client properly, and the client station cannot connect to the network.

● Check the AP Settings

For the AP settings, refer to the User Guide provided by the AP manufacturer.

- A2** Verify whether the environment is suitable for using a wireless LAN. The use of a wireless LAN may be restricted according to the environment and distance. Obstacles such as walls or doors affect the use of a wireless LAN. Install the AP in a high and open space, 50cm from the wall and far removed from any other radio signal sources.

- A3** Verify whether the AP is operating properly.

- When the AP is not operating normally, turn off the AP, wait a short while, and turn it on again.
- Verify whether the AP's firmware is the most recent version. (Contact the AP manufacturer or the place where you purchased the AP for details of the AP firmware.)

- A4** Verify whether the AP has been properly connected to the network. Verify whether the network is operating normally by connecting the wired network cable, which has been connected to the AP, to your computer.

- A5** Check the network key settings (encryption key) again. When automatic code conversion (a passphrase function) has been selected and data communication is not functioning even with a normal wireless connection, it is recommended entering the network key (encryption key) manually.

- A6** Check the AP settings as follows.
(The following is recommended for a standard environment and thus may differ according to the specific wireless network environment.)
- When several APs are present simultaneously, check the channel settings for each AP. When different APs are using nearby channels, interference may occur between the electronic waves. Set the AP channels further apart from each other. (Ex: Ch1, Ch5, Ch9, Ch13)
 - When an AP's SSID (Service Set ID) option is set to "Hide", you cannot search for that AP on the computer. We recommend unselecting the "Hide" option for the AP. The SSID is a name used for distinguishing one wireless LAN from another wireless LAN.
 - It is recommended using Long Preamble. Preamble is a signal for data transmission synchronization. Short Preamble may be supported by some types of APs but may cause compatibility problems.
 - It is recommended using a static IP.
 - Since static channel selection is more reliable than auto channel selection, it is recommended using a static channel.

Q I have set the same IP address for both the wireless and wired connections, but they do not work properly.

- A** You cannot use wireless and wired connections using the same IP address. To sequentially use both the wired and wireless connections with the same IP address, you need to set the currently not needed connection to Do Not Use in the Network Connections of the Control Panel.

Q The wireless LAN does not work properly when there is a device operating on an adjacent frequency in the vicinity of the product.

- A1** Channel interference may occur when a wireless video transceiver or a microwave oven is being used. If you experience channel interference from other equipment, we recommended changing the channel for connecting to the AP. For more information about AP settings, refer to the User Manual supplied by the AP manufacturer.
- A2** Since IEEE802.11g equipment operates in hybrid mode when there is active IEEE802.11b equipment, the data rate may be degraded.

Games and Programs Related

Windows may not provide some functions properly when performing some applications especially games, or may cause a problem due to a device driver compatibility issue. For the latest device drivers and bug fixes, please refer to the respective company's website.

Q 3D game is not executed, or some functions are not working.

- A** Change the graphic setting of the game to "2D" or "Software Renderer," then execute the program again.

Q Game play is not displayed smoothly on the screen.

- A** For 3D games, the texture data for the 3D screen display is saved to the system memory. If there is insufficient system memory, the data is saved to the hard disk drive and loaded to memory when required. This operation may temporarily stop displaying the picture on the screen. In this case, lower the game resolution or the screen settings.

Q The picture on the screen is displayed as a broken image for some games.

- A** A part of the picture on the screen may be broken when playing some games that require a high-specification graphics card. In this case, set the 3D function setting for the game to a lower value or set the game resolution to a lower value.

Q I launched a game right after installing it, and the game is not executed.

- A** This problem may occur when the game is not compatible with Windows. Launch the game again, and it will be executed properly.

Q **Fn +  Key combination does not work.**

- A** While displaying video of VCD or MPEG, or the display setting is **Dual View**, you cannot toggle display devices. Also the installation of NetWare Client 32 program disables the function of **Fn + .**

Q **While playing a game, pressing the Fn +  keys does not work or the screen is not properly displayed.**

- A** Some games and 3D application programs may change the display device control. Therefore, pressing the **Fn +  keys may terminate the running program or may display an abnormal screen.**

Press the **Fn +  keys before launching a program and do not press them while running the program.**

Q **Running speed of a game is too slow or fast.
(for the Windows XP operating system only)**

- A** Change the setting of Power Schemes to “Always On.”
(Click **Start > Control Panel > Performance and Maintenance > Power Options > Power Schemes** tab, then configure the Power schemes field to “Always On.”)

Q **Some part of a game image is not displayed or is displayed in black.**

- A** This may happen when running a game designed for DirectX 8.1 or which has 1024 x 768 as the default resolution, such as NHL 2003, MVP Baseball 2003, Special Forces, Hangame, Pmang etc.

Q The picture is not displayed properly for some games.

- A** Some games may not display the picture properly when the screen resolution is set to 1024×600 and the color quality is set to 32 bit.
For these games, set the screen resolution to 1024×600 or 800×600 , and the color quality to 16bit.

Bluetooth

Q How to view the Bluetooth help information.

A ► For Windows 7

Press the **Windows + F1** key combination to launch Windows Help and search for Bluetooth related items in the Help section.

► For Windows XP

Double-click the **My Bluetooth Environment shortcut icon** on the **Desktop** to launch the program, and then press the **F1** key to view the help information.

Q I cannot find or connect the headset.

A1 If the headset is connected to another device and is currently being used, you will not be able to locate it. In this case, even if you locate the headset, you will not be able to connect it. Disconnect the headset from the device and then try again.

A2 For some headset models, if the headset is connected to the power adapter, the headset cannot be connected through the Bluetooth wireless connection.

Disconnect the headset from the power adapter and try again.

A3 A Bluetooth headset generally provides On/Off and Pairing modes. To connect the headset to another Bluetooth device such as a computer or cellphone, it must be in Pairing mode. Switch the headset to Pairing mode and try again.

In general, a Bluetooth headset in Pairing mode is automatically switched to On/ Off mode after a pre-determined period of time.

Usage Instructions

- Generally, Bluetooth devices deliver stable performance while connected within a 3m(10 ft.) distance.
- For Bluetooth to operate smoothly, use the computer in an open environment with no walls or obstacles in the way and having low radio interference.
- You can connect to only one Bluetooth device at a time for a phone connection, data syncing, electronic business card exchange, FAX transmission/reception, sound related functions, and serial port functions.
- It is recommended using only one Bluetooth device at a time as connecting multiple Bluetooth or other wireless devices at the same time may slow or destabilize the Bluetooth connection.
- Data communications via Bluetooth may be poor when the CPU load is at full capacity or there are insufficient system resources.
- The Bluetooth function of a Bluetooth PDA, mobile phone, mouse or keyboard may be turned off. To use them in connection with a Samsung computer supporting Bluetooth, you must check if the Bluetooth function of the device to connect to is turned on. For the procedures on turning on the Bluetooth function of a device, refer to the relevant device manual.
- The services provided by Bluetooth devices may vary depending on their capabilities. For the services provided by the Bluetooth device, refer to the device manual.



Chapter 5.

Appendix

Product Specifications

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Product Specifications

The system specifications may differ depending on the derived models. For detailed system specifications, refer to the product catalog.

CPU	Intel ATOM™ Processor
Main Memory (Optional)	Memory type: DDR2 SODIMM
Main Chipset	Intel NM10 Express
Hard Disk Drive (Optional)	9.5mmH SATA HDD
Graphics	Intel GMA 3150
Operating Environment	Temperature : -5~40°C for storage, 10~32°C when operating Humidity : 5~90% for storage, 20~80% when operating
Operating Voltage	100 - 240VAC
Frequency	50/60Hz
Output Power (Optional)	40W
Output Voltage (Optional)	19VDC 2.1A(40W)



- Optional components may not be provided or different components may be provided depending on the computer model.
- The system specifications are subject to change without notice.

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Glossary

The Glossary lists the terminologies used in this User Guide. For terminologies other than these, look in Windows Help.

Backup

A way to save the current data to restore it later if necessary. A backup is a way to restore computer data when the data or computer is damaged.

Chargeable USB

This program enables supplying power to a specific USB port when the system is in power saving mode, hibernation mode or off.

Client

This refers to a computer that uses a shared network resource provided by a server.

DDR SDRAM (Double Data Rate Synchronous Dynamic Random Access Memory)

DRAM is a memory type whose cells consist of a capacitor and transistor manufactured at a low price. SDRAM is a memory type whose performance has been improved by synchronizing the clock with the external CPU clock. DDR SDRAM is a memory type whose performance has been improved by

doubling the operating speed of the SDRAM and is widely used nowadays. This computer uses DDR SDRAM.

Device Manager

An administrative tool used to manage computer devices. You can add or remove hardware or update a device driver using the Device Manager.

Direct X

An application interface developed to enable Windows application programs to access hardware devices at a very high speed. Since the operating speed of graphics, memory and sound cards must be very fast to provide high quality video and sound for games, Direct X enables faster control and interaction between applications and hardware devices. By using Direct X, the multimedia performance of Windows has been hugely improved.

Driver

Software that interacts between the hardware and the operating system. An operating system knows the hardware information and controls the hardware. In general, a driver is supplied with the corresponding hardware device.

DVD (Digital Versatile Disk)

DVD was developed to replace CD (compact disk). Although the shape and size of the disc are the same as that of a CD, the capacity of a DVD is at least 4.7GB while the capacity of a CD is 600MB. DVD video is digital unlike VHS (analog) video and supports MPEG2 compression and digital audio. To play a DVD, a DVD drive is required.

Firewall

A security system used to protect an internal network or intranet from external networks through an authentication procedure.

Hibernation Mode

A power mode that saves all data in memory to the hard disk and turns the CPU and hard disk off. When canceling Hibernation Mode, all application programs that were running are restored to their last state.

Icon

This refers to a small image that represents a file that users can use.

LAN (Local Area Network)

A communications network connecting computers, printers and other devices within a local area such as within a building. A LAN enables all connected devices to interact with other devices on the network. The current LAN uses the Ethernet media access control method developed in the early 1980s. To connect to an Ethernet, a network card called a LAN card, Ethernet card or network interface card is required. To exchange data between computers, a protocol is required besides the hardware equipment. Windows XP uses TCP/IP as the default protocol.

LCD (Liquid Crystal Display)

There are Passive Matrix and Active Matrix LCD types. This computer uses the Active Matrix type LCD called a TFT LCD. Since an LCD is implemented by transistors instead of a cathode-ray tube unlike a CRT, its size can be slim. And because it does not blink, it reduces eye strain.

Network

A group of computers and devices, such as printers and scanners, connected by a communications link. A network can be either small or large and can be connected permanently through cables or temporarily through telephone lines or wireless links. The biggest network is the Internet, a worldwide network.

Notification Area

This refers to the right area of the Taskbar including program icons such as the volume control, the power options and the time.

Power Schemes

This refers to a pre-determined power management option group. For example, you can set the time the computer waits before entering Standby Mode, or before the monitor or hard drive turns off. The settings are saved as a power scheme.

Quick Launch

This refers to a toolbar that can be configured so that you can launch a program such as Internet Explorer or display the Windows Desktop with one click. You can add any icon to the quick launch area of the Taskbar and launch frequently used program by clicking that icon.

Server

In general, a server refers to a computer that provides shared resources for network users.

Share

This refers to setting a resource of a computer such as a folder or printer so that other users can also use it.

Shared Folder

A folder that can be used by other users on the network.

SSD (Solid State Disk)

This refers to a device that saves information to semiconductors unlike a normal hard disk drive (HDD). There are two types of SSD. One saves data to the DRAM and the other saves data to the Flash Memory. Since there are no mechanical parts, an SSD provides a much better performance than an HDD. Especially, a Flash Memory-Type SSD provides high reliability and durability.

Network Administrator

A user who plans, configures and manages network operations. Sometimes, a network administrator is called a system administrator.

Sleep Mode

A power mode that enables computers to save power consumption when they are not being used. When a computer is in Sleep Mode, the data on the computer memory is not saved to the hard disk. If the power is turned off, the data in memory will be lost.

System File

System Files refer to files that are read and used by the Windows operating system. In general, system files must not be deleted or moved.

USB (Universal Serial Bus)

This refers to a serial interface standard developed to replace the conventional interface standards such as Serial and PS/2. While USB 1.1 supports 12Mbps (12 million bits per second), USB 2.0 supports a data rate that is 40 times (480Mbps) faster than that of USB 1.1. The data rate of USB 2.0 is equivalent to that of IEEE1394. Therefore USB 2.0 is used for A/V devices supported by IEEE 1394 and a 2nd HDD and CDRW that require a high data rate.

Virtual XP Mode

This is a virtual operating system that enables running Windows XP programs on the Windows 7 operating system. Using this mode, you can run programs that do not run on Windows 7.

Windows Media Player

A multimedia program included with Windows. Using this program, you can play a media file, create an audio CD, listen to a radio broadcast, search and manage media files, and copy files to a portable device, etc.

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